

City of Loma Linda 2014-2021 Housing Element

Initial Study and Negative Declaration



Lead Agency

City of Loma Linda
25541 Barton Road
Loma Linda, California 92354

Consultant to the City

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Section 1: PURPOSE AND AUTHORITY OF INITIAL STUDY

1.1 – PURPOSE AND AUTHORITY

The purpose of this Initial Study is to identify and assess the level of the environmental impacts that could result from any potential future physical change in the environment resulting from the adoption and implementation of the City of Loma Linda General Plan 2014-2021 Housing Element.

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) Statutes and Guidelines and the City of Loma Linda's local rules and regulations. The proposed project requires discretionary approval from the City of Loma Linda and review by the California Department of Housing and Community Development (HCD). As the project initiator and because of the legislative approvals involved, the City is the Lead Agency with respect to this Initial Study pursuant to §15367 of the CEQA Guidelines. No other governmental agencies have discretionary permitting authority with respect to approval of the proposed project, and there are no Trustee Agencies, as defined in §21070 of the CEQA Statutes.

Pursuant to §15074 of the CEQA Guidelines, prior to approving this project, the City is obligated to consider the findings of this Initial Study and to either adopt a Negative Declaration (ND), a Mitigated Negative Declaration (MND), or to determine that an Environmental Impact Report (EIR) is required. The findings of this Initial Study support adoption of a ND, as discussed in Section 4. This means that the long-term plan for development and maintenance of housing pursuant to proposed Housing Element policies, in accordance with the governing land use planning policies and zoning standards, would be less than significant.

The environmental determination that is ultimately adopted or certified by the City is part of the discretionary review process with respect to evaluating the merits and disadvantages of the adoption and implementation of the proposed 2014-2021 Housing Element. The findings and determination of impact significance presented herein neither presuppose nor mandate any actions by the City concerning future decisions on the proposed 2014-2021 Housing Element Update.

1.2 – CONTENTS

This Initial Study has been prepared to comply with Section 15063 of the State CEQA Guidelines, which sets forth in the required contents of an Initial Study. These include:

- A description of the project, including the location of the project (see Section 2)
- Identification of the environmental setting (see Section 2.11)
- Identification of environmental effects by use of a checklist, matrix, or other methods, provided that entries on the checklist or other form are briefly explained to indicate that there is some evidence to support the entries (see Section 3)
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls (see Sections 2.6 and 2.7)
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study (see Section 5.1)

1.3 – TIERING

Section 15152 et al of the CEQA Guidelines describes “tiering” as a streamlining tool as follows:

(a) "Tiering" refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.

(b) Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration. Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration. However, the level of detail contained in a first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.

(c) Where a lead agency is using the tiering process in connection with an EIR for a large-scale planning approval, such as a general plan or component thereof (e.g., an area plan or community plan), the development of detailed, site-specific information may not be feasible but can be deferred, in many instances, until such time as the lead agency prepares a future environmental document in connection with a project of a more limited geographical scale, as long as deferral does not prevent adequate identification of significant effects of the planning approval at hand.

(d) Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to

or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

- (1) Were not examined as significant effects on the environment in the prior EIR; or
 - (2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.
- (e) Tiering under this section shall be limited to situations where the project is consistent with the general plan and zoning of the city or county in which the project is located, except that a project requiring a rezone to achieve or maintain conformity with a general plan may be subject to tiering.
- (f) A later EIR shall be required when the initial study or other analysis finds that the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR. A negative declaration shall be required when the provisions of Section 15070 are met.
- (1) Where a lead agency determines that a cumulative effect has been adequately addressed in the prior EIR that effect is not treated as significant for purposes of the later EIR or negative declaration, and need not be discussed in detail.
 - (2) When assessing whether there is a new significant cumulative effect, the lead agency shall consider whether the incremental effects of the project would be considerable when viewed in the context of past, present, and probable future projects. At this point, the question is not whether there is a significant cumulative impact, but whether the effects of the project are cumulatively considerable. For a discussion on how to assess whether project impacts are cumulatively considerable, see Section 15064(i).
 - (3) Significant environmental effects have been "adequately addressed" if the lead agency determines that:
 - (A) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report; or
 - (B) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.
 - (g) When tiering is used, the later EIRs or negative declarations shall refer to the prior EIR and state where a copy of the prior EIR may be examined. The later EIR or negative declaration should state that the lead agency is using the tiering concept and that it is being tiered with the earlier EIR.
 - (h) There are various types of EIRs that may be used in a tiering situation. These include, but are not limited to, the following:
 - (1) General Plan EIR (Section 15166)

Section 1: Purpose and Authority of Initial Study

- (2) Staged EIR (Section 15167)
- (3) Program EIR (Section 15168)
- (4) Master EIR (Section 15175)
- (5) Multiple-family residential development / residential and commercial or retail mixed-use development (Section 15179.5)
- (6) Redevelopment project (Section 15180)
- (7) Projects consistent with community plan, general plan, or zoning (Section 15183)

This Initial Study for the Loma Linda 2014-2021 Housing Element has been prepared to tier upon the City of Loma Linda General Plan EIR (March 22, 2004) and EIR Addendum (April 8, 2009). This document is available for public review at:

City of Loma Linda
Community Development Department, Planning Division
25541 Barton Road
Loma Linda, CA 92354

1.4 – APPROACH

The environmental analysis contained in this Initial Study is based on the following assumptions:

General Plan Consistency: As the General Plan is updated and/or amended, the City will ensure that such updates do not prevent implementation of the policies contained in the proposed 2014-2021 Housing Element.

Project Specific Environmental Review: In the City of Loma Linda, all development proposals are subject to an environmental review process to determine if CEQA review is required and if so, to identify potential impacts and impose appropriate mitigation measures, if needed, to avoid significant impacts. This includes both discretionary projects, subject to the requirements of CEQA, and smaller-scale ministerial projects that require issuance of building permits.

Purpose of Environmental Review: This project does not authorize any plan for construction of new homes or other uses or redevelopment of any properties. No direct environmental impacts, therefore, would occur. This Initial Study addresses the assessment of potential environmental impacts resulting from the long-term effects of potential development facilitated by the proposed 2014-2021 Housing Element in accordance with existing land use policies. The purpose of the environmental assessment is to determine whether there are any peculiar types of impacts that could occur as an indirect result of the adoption and implementation of the proposed 2014-2021 Housing Element that were not examined in the General Plan EIR (2004) and EIR Addendum (2009) or if there could be impacts that are more severe than those anticipated in the EIR.

Section 2: PROJECT DESCRIPTION

2.1 – PROJECT TITLE

City of Loma Linda 2014-2021 Housing Element

2.2 – LEAD AGENCY NAME AND ADDRESS

City of Loma Linda
25541 Barton Road
Loma Linda, California 92354

2.3 – CONTACT PERSON AND PHONE NUMBER

Guillermo Arreola, Associate Planner
909-799-2830

2.4 – PROJECT LOCATION

The City of Loma Linda 2014-2021 Housing Element Update applies to all proposed and existing residential and mixed-use zoning districts, as well as to General Plan land use designations that allow residential or mixed-use development within the municipal boundaries of the City of Loma Linda. The City of Loma Linda is located in the County of San Bernardino and is bounded by the cities of Redlands and San Bernardino to the north, unincorporated Riverside and San Bernardino Counties to the south, city of Redlands and unincorporated San Bernardino County to the east, and unincorporated San Bernardino County and the cities of Colton and San Bernardino to the west. The San Bernardino Freeway (Interstate 10), which forms the northern boundary of the City, provides regional access. The City's sphere of influence encompasses approximately 9.45 square miles; eight square miles of this area are located within the City limits. Exhibit 1 (Regional Location and Vicinity Map) illustrates the City's location within San Bernardino County and its local context.

2.5 – PROJECT SPONSOR'S NAME AND ADDRESS

City of Loma Linda
25541 Barton Road
Loma Linda, California 92354

2.6 – GENERAL PLAN DESIGNATIONS

The residential and mixed-use land use designations that support housing development within the City of Loma Linda include those listed in Table 1 (General Plan Residential Land Uses).¹

¹ City of Loma Linda General Plan. Chapter 2: Land Use Element. 2009.

Section 2: Project Description

Table 1
General Plan Residential Land Uses

General Plan Land Use Designation	Zoning District	Intended Use	Maximum Density
Hillside Conservation Area	A-1	Very low density single-family in the Hillside Conservation Area	1 du/10 ac (allows bonus of up to 1 du/5 ac when specific criteria are met)
Low Density Hillside Preservation	A-1	Low density single-family in the Hillside Preservation Area (only in use in the City's SOI)	1 du/10 ac
Medium Density Hillside Preservation	A-1	Low density single-family in the Hillside Preservation Area (only in use in the City's SOI)	1 du/5 ac
South Hills	A-1	Single-family residential development with consideration of sensitive hillside areas	1 du/10 ac (non-clustered development)/ 1 du/2 ac (clustered development)
Rural Estates	A-1	Single-family homes in a rural setting	1 du/ac
Very Low Density Residential	R-1	Single-family residential homes in a large lot, suburban setting	2 du/ac
Low Density Residential	R-1	Traditional single-family subdivisions	4 du/ac
Medium Density Residential	R-2	Single-family residential, duplexes, townhouses, and condominiums	9 du/ac
Medium High Density Residential	R-3	Multi-family uses consisting of low-rise condominium and apartment style development	13 du/ac
High Density Residential	R-3	Multi-family uses consisting of low-rise (one to three stories) condominium and apartment style development	13 du/ac
Very High Density Residential	R-3	Multifamily uses consisting of low-rise (one to three stories) condominium and apartment style development	20 du/ac
Senior Citizen Housing	R-SH	Multi-family uses consisting of condominium and apartment style development with age-restricted developments	25 du/ac
San Timoteo Creek Area	PC	Single-family residential	2 du/ac
Special Planning Areas	Various	Various	Varies by Planning Area

2.7 – ZONING DISTRICTS

Existing zoning districts that support residential development in Loma Linda are listed in Table 2 (Residential Zoning Districts) along with the applicable development standards.² Zoning regulations establish six basic residential zoning districts in Loma Linda.

Table 2
Residential Zoning Districts

Land Use Activity	A-1	R-1	R-2	R-3	R, M-H	R-SH
Maximum Units Net/Acre	1	6	12	20	-	-
Minimum Lot Area (sq. ft.)	1.0 ac	7,200	7,200	7,200	3,500	3.0 ac
Lot Area per Dwelling Unit	1.0 ac	7,200	3,600	2,200	-	-
Lot Width (feet)	150	65	65	65	44	-
Front Setback, Main Structure (feet)	25	25	25	20	10	35
Front Setback, Street Facing Garage (feet)	-	-	-	-	10 for side entry, 20 for front entry	25
Rear Setback (feet)	15	15	15	15*	10	25
Side Setback (each)	15	5	5	10% of lot width	5	35
Side Setback (street side)	15	15	15	10	10	25
Structural Parcel Coverage (maximum)	-	40%	50%	60%	50%	35%
Distance Between Main Structures (feet)	-	-	-	10*	-	20
Distance Between Accessory Structures (feet)	20	-	-	-	-	-
Common Useable Open Space (sq. ft.)	-	-	0-1bedroom: 600 sq ft 2bedroom: 700 sq ft 3+ bedroom: 800 sq ft	0-1bedroom: 600 sq ft 2bedroom: 700 sq ft 3+ bedroom: 800 sq ft	-	1,000 sq. ft. / unit
Private Outdoor Living Space (sq. ft.)	-	1,200			-	-
Main Bldg./Structure Height (maximum)	35 feet				20 feet	-
Accessory Bldg./Structure Height (maximum)	35 feet or 2 stories					-

* with additional 5 for each story above a one-story structure

² City of Loma Linda. Municipal Code Title 17.

2.8 – PROJECT DESCRIPTION

The project is the adoption and implementation of the Loma Linda General Plan 2014-2021 Housing Element Update.

Housing Element

The Housing Element is one of seven required elements of the General Plan. It addresses existing and future housing needs of persons in all economic segment groups, and serves as a tool for decision-makers and the public in understanding and meeting housing needs in Loma Linda. While the law does not require local governments to actually construct housing to meet identified needs, it does require that the community address housing needs in its discretionary planning actions by creating opportunities for housing in the land use plan and facilitating housing development through policy.

Statutory Requirements

State law requires that all housing elements address four key topics: 1) housing needs, 2) constraints to housing development, 3) housing resources, and 4) a housing plan. Analysis of these topics provides the foundation for the preparation of a housing element. Article 10.6, Section 65580 – 65589.8, Chapter 3 of Division 1 of Title 7 of the Government Code sets forth the legal requirements for a housing element and encourages the provision of affordable and decent housing in suitable living environments for all communities to meet statewide goals. This 2014-2021 Housing Element update is a policy document of the City of Loma Linda regarding current and projected future housing needs, and the City's goals, policies, and programs to address those identified needs, and represents a focused update to the City's adopted 2008-2014 Housing Element.

The Housing Element that the City of Loma Linda adopted for the 2008-2014 Housing Element planning period did not fully comply with state law as determined by the California Department of Housing and Community Development (HCD). As such, Government Code Section 65584.09 requires that the 2014-2021 Housing Element analyze any unaccommodated housing needs from the previous planning period, in addition to the current needs. That is, any deficit in the very low- and low-income housing units from the 2008 RHNA must be accommodated in this Housing Element. The 2008 RHNA for the City of Loma Linda was 2,646 units, divided into the following affordability levels:

- 610 extremely low/very low-income units
- 432 low-income units
- 501 moderate-income units
- 1,103 above moderate-income units.

The 2008 RHNA used January 1, 2006 as the baseline date. As a result, housing units constructed, permitted, or entitled since this baseline date can be credited toward the RHNA for the 2008-2014 Housing Element cycle. Based on City records, since the beginning of 2006, 463 units have been developed, under construction, or approved. With credit for the 463 units developed, under construction, or approved, the remaining unaccommodated RHNA (2008) of 701 very low- and low-income units, in addition to the current RHNA of 1,095 units, yields a RHNA of 1,796 units that must be accommodated during the 2014 to 2021 planning period. These units are distributed as follows:

- 671 extremely low/very low-income units
- 461 low-income units
- 202 moderate-income units
- 462 above moderate-income units

Housing Needs

Several factors influence the demand for housing in Loma Linda and consistent with State Housing Element law. The four major needs categories considered in the Housing Element include: 1) housing needs resulting from population growth, both in the City and the surrounding region; 2) housing needs resulting from overcrowding of units; 3) housing needs that result when households are paying more than they can afford for housing; and 4) housing needs of "special needs groups" such as the elderly, large families, female-headed households, households with a physically or developmentally disabled person, farm workers, and the homeless.

The Loma Linda 2014-2021 Housing Element profiles key community demographics and examines the related housing needs of various groups, including owners versus renters, lower-income households, overcrowded households, elderly households, special needs groups, and homeless persons. This information is detailed in the Housing Element.

California housing element law requires that each city and county develop local housing programs designed to meet their "fair share" of housing needs for all income groups, based on projected population growth. The HCD Housing Policy Division develops the RHNA for each region of the State represented by councils of governments. The Southern California Association of Governments (SCAG) determines the housing allocation for each city and county within its six-county jurisdiction. SCAG has assigned Loma Linda a housing allocation of 1,095 units for the 2014-2021 planning period. Since the City's 2008-2014 Housing Element did not fully comply with HCD, the remaining 2008 RHNA of 701 very low- and low-income units in addition to the current RHNA of 1,095 must be accommodated during the 2014-2021 planning period. Table 3 (Regional Housing Needs Assessment) identifies the projected housing needs for the 2014-2021 Housing Element.

Table 3
2014-2021 Regional Housing Needs Assessment

Income Category	% of County AMI	2014-2021 RHNA Allocation Number of Units	Percentage of Units
Extremely Low/Very Low	0-50%	254	23.2%
Low	51-80%	177	16.2%
Moderate	81-120%	202	18.4%
Above Moderate	120% +	462	42.2%
Total		1,095	100%

Source: SCAG 2013

Table 4
Total RHNA to Be Accommodated for 2014-2021

	Extremely/Very Low Income (0- 50%)	Low Income (51-80%)	Moderate Income (80-120%)	Above Moderate Income (120% +)	Total
2008-2014 RHNA	610	432	501	1,103	2,646
2008-2014 RHNA Credits (Total Units Constructed/Under Construction/Permits Issued)	(193)	(148)	(6)	(116)	(463)
2008-2014 Remaining RHNA	417	284	NA*	NA*	701
2014-2021 RHNA	254	177	202	462	1,095
Total RHNA (2008- 2014 and 2014-2021)	671	461	202	462	1,796

*Note: The unaccommodated RHNA units in the moderate- and above moderate-income categories are not required be accommodated in this Housing Element. Only the 1,196 unaccommodated units in the very low- and low-income categories must be accommodated in this Housing Element.

Housing Opportunity Areas

The Loma Linda Housing Element identifies sites and future housing development opportunities for the 2014-2021 planning period to meet the RHNA. The City has identified vacant and underutilized land within the City as Opportunity Sites. Some Opportunity Sites are located within two of the City's Special Planning Areas (SPAs B and D). These Opportunity Sites yield sufficient capacity to meet the combined 2008-2014 RHNA and 2014-2012 RHNA of 1,796 units. The Opportunity Sites are described in the following pages and identified in Exhibit 2. Opportunity sites are identified based on existing land use policy that would permit residential development, stated developer interest, location, and limited land value to improvement ratios.

Vacant Residential Land

The inventory of vacant residential land (exclusive of acreage in the SPAs) totals 756 acres. The majority of these vacant parcels are designated for lower-density development. Vacant properties have the potential to yield 583 units, 173 of which can facilitate lower-income housing. The majority of the identified vacant residential sites are located in the southwest portion of the City. Vacant residential sites are listed below in Table 5.

Table 5
Residential Capacity on Vacant Residential Sites

General Plan	Zoning	Max. Density	Acres	Realistic Capacity (units)	Affordability Level
South Hills	Hillside/R-1	1 du/10 ac	333.0	51	Above Moderate
Hillside Conservation Area	Hillside/R-1	1 du/10 ac	290.0	31	Above Moderate
Rural Estate	R-1	1 du/ac	34.2	34	Above Moderate
Low Density Residential	R-1	4 du/ac	82.0	264	Above Moderate
Medium Density Residential	R-3/R-1	9 du/ac	4.1	30	Above Moderate
High Density Residential	R-3/R-1	13 du/ac	5.5	58	Moderate
Very High Density Residential	R-3	20 du/ac	7.2	115	Very Low/Low
Total			756.0	583	

Note: Potential Units do not reflect straight application of maximum density to vacant land. A realistic density calculation of 80 percent of the maximum density has been applied to most residentially zoned sites outside of Special Planning Areas. Due to the very low densities allowed, for sites zoned for lower densities (from 0.1 units per acre to 1 unit per acre) a realistic capacity is calculated at the maximum allowed.

Underutilized Residential Land

Future housing units can be accommodated on underutilized land currently developed at less than the maximum permitted density. Many of the identified sites are located in areas intended for high density development yet the sites are developed with single-family homes. The analysis of residentially zoned land reveals that underutilized residential properties have the potential for development of at least 352 dwelling units (198 units on properties with appropriate densities to facilitate lower-income housing). Identified underutilized sites are located in the north central, central, eastern and western portions of the City. Underutilized residential sites are listed in Table 6 below.

Table 6
Residential Capacity on Underutilized Residential Sites

General Plan	Zoning	Max. Density	Acres	Realistic Capacity (units)	Affordability Level
Low Density Residential	R-1	4 du/ac	9.6	31	Above Moderate
Medium Density Residential	R-3/R-1	9 du/ac	17.1	123	Above Moderate
High Density Residential	R-3/R-1	13 du/ac	9.1	95	Moderate
Very High Density Residential	R-3	20 du/ac	6.4	103	Very Low/Low
			42.2	352	

Note: Potential Units do not reflect straight application of maximum density to vacant land. A realistic density calculation of 80 percent of the maximum density has been applied to most residentially zoned sites outside of Special Planning Areas.

Vacant and Underutilized Land in Special Planning Areas

Two SPAs offer residential development opportunities in a higher-density, mixed use environment. In addition to vacant land intended for residential and mixed use, underutilized land that is developed at lower densities than allowed by the General Plan and Zoning Code are

also included. With the SPAs established in 2006, the City intended to create areas in which a mix of uses can come together to meet the commercial, employment, institutional, and residential needs of the neighborhood and community through efficient patterns of land use. As established in the Land Use Element, each SPA has its own purpose and intent. To those ends, specific parameters for future developments have been established. The intent for developments within the SPAs and detailed development parameters are included in the General Plan Land Use Element. These parameters include the type and density of residential uses to be developed as well as the total number of housing units expected to be developed. In this respect, the City's approach to development within in the SPAs is more focused than a traditional zoning approach. The zoning designations do not include a description of expected land uses in the SPA; instead, the zoning code defers to the detailed land use scenarios in the General Plan. The land use scenarios reflect the City's plans for future development in these undeveloped areas.

The City's land use planning approach is intended to provide flexibility for development of the many acres of underutilized and vacant land within the SPAs while maintaining a specific intent and vision for the SPAs. For this reason, a development scenario as adopted in the General Plan is presented for each area, and capacity is not calculated on a parcel basis since the exact type of development on each parcel is not established. The parcels included in SPAs B and D have the capacity to accommodate 1,455 units at densities considered appropriate for affordable housing development.

Special Planning Area B (Anderson/Van Leuven Area)

Special Planning Area B is located in the northwest portion of the City east of Anderson Street, north of Van Leuven Street, south of San Timoteo Creek, and west of existing residential uses and vacant parcels along Poplar Street. The intent for this area is a mixed use village with residential, office, retail, cultural, medical/health care, educational, and recreational uses. General Plan policies for this SPA include encouraging mixed use as well as medium high (0-13 du/ac) to very high (0-20 du/ac) density residential, as well as senior housing (0-25 du/ac). The SPA B parcels have the potential to yield approximately 499 units at densities appropriate to encourage affordable housing, as seen in Table 7.

Table 7
Special Planning Area B: Estimated Development Scenario

Type of Development	Acres	Capacity (units)	Affordability Level
Mixed Use (expected 20 du/ac)	7.98	128	Very Low/Low
High Density Residential (0-13 du/ac)	7.98	83	Moderate
Very High Density Residential (0-20 du/ac)	7.98	128	Very Low/Low
Senior Housing	7.98	160	Very Low/Low
Non Residential Uses	10.6	--	NA
Total	42.54	499	

Note: Notes: Reflecting the development intent established in the General Plan for SPA B as a mixed use village, only 75 percent of land included in the sites inventory is used to calculate residential capacity (including mixed use).

Section 2: Project Description

Special Planning Area D (Redlands Boulevard/California Street)

This Special Planning Area is bordered by Redlands Boulevard on the north, California Street on the east, Mission Road on the south, and the Edison transmission towers to the west. The General Plan envisions future development in this area to be characterized by a horizontal and vertical mixed uses developed along the frontages of Redlands Boulevard and California Street, including commercial, office, structured parking, and very high-density residential dwelling units within a mixed use context. Currently, orange groves comprise 218 acres of the site, 43 acres are considered vacant, and seven acres are developed with low-scale residential uses. A large portion of the site (63 acres of the site which are either vacant or have agricultural uses) are owned by the City of Loma Linda. The SPA D parcels identified in the site inventory have the potential to yield approximately 956 units, a majority of which will be at densities appropriate to encourage affordable housing, as seen in Table 8.

Table 8
Special Planning Area D: Estimated Development Scenario

Type of Development	Acres	Capacity (units)	Affordability Level
Low Density Residential (0-4 du/ac)	268.73*	288	Above Moderate
High Density Residential (0-13 du/ac)		119	Moderate
Mixed Use (expected 20 du/ac)		358	Very Low/Low
Senior Housing (0-25 du/ac)		191	Very Low/Low
	268.73	956	

Note: Close to 87 percent of the land in SPA D is included in the sites inventory. The capacity represented reflects 87 percent of the specific development parameters established in the General Plan for each land use type. As mentioned previously, capacity is not calculated on a parcel basis – as the exact type of development on each parcel is not established. This provides flexibility in design for future development.

The sites inventory has identified capacity for 2,390 units, 1,183 of which are on sites suitable for development of lower-income housing. The sites and RHNA comparison indicate that there are adequate sites to accommodate the total RH NA (2014 and 2008 unaccommodated RHNA).

Housing Plan

The proposed 2014-2021 Housing Element objectives, policies, and programs aim to: 1) provide adequate sites to meet the 2014-2021 RHNA; 2) assist in the development of housing to meet the needs of lower-income households; 3) address and where appropriate, and legally possible, remove governmental constraints to housing development; 4) conserve, preserve, and improve the condition of the existing affordable housing stock; and 5) promote equal housing opportunity.

The objective is to facilitate and encourage housing that fulfills the diverse needs of the community. To achieve this goal, the Housing Plan identifies long-term housing goals and supporting policies to address housing needs. The goals and policies are then implemented through a series of housing programs. Programs identify specific actions the City plans to undertake toward achieving each goal and policy. The goals identified in the Loma Linda Housing Element are listed below.

Goal 1: Enhance housing opportunities for all Loma Linda residents.

Goal 2: Assist in the provision of adequate housing to meet the needs of the community.

Goal 3: Mitigate potential governmental constraints to housing production and affordability.

Goal 4: Maintain and improve the quality of existing housing and residential neighborhoods in Loma Linda.

Goal 5: Promote equal housing opportunity for all residents.

2.9 – PROJECT OBJECTIVES

The goals, policies, and programs in the Housing Element build upon the identified housing needs in the community, constraints confronting the City, and resources available to address the housing needs. Loma Linda's housing goals, policies, and programs address the following six major areas:

- Adequate sites for new housing
- Affordable housing development
- Affordable housing assistance
- Removal of governmental constraints to housing
- Housing and neighborhood preservation
- Equal housing opportunity

2.10 – SURROUNDING LAND USES

The Opportunity Sites shown in Exhibit 2 (Housing Sites Inventory Map) are located throughout the City. The majority of the identified vacant residential sites are located in the southwest portion of the City. Vacant Special Planning Area sites are generally located in the central and northeast portion of the City. Underutilized residential sites are located throughout the northern portion of the City. Underutilized sites within the SPAs are located in the northeast and northwest portion of the City. Given the variety of Opportunity Areas, it is difficult to provide specific surrounding land use information for every site, but it is not necessary.

2.11 – ENVIRONMENTAL SETTING

The City of Loma Linda is located in western San Bernardino County in the eastern San Bernardino Valley, 60 miles east of the City of Los Angeles. The City's elevation ranges from 1,040 feet in the northwest to 2,117 in the southeast. The northern half of the City has relatively flat topography and has been developed with residential, commercial and institutional uses. Numerous agricultural parcels lie in the eastern portion of the City, between Mountain View Avenue and Nevada Street, south of Redlands Boulevard and into San Timoteo Canyon. The southern half of the City consists of undeveloped hills. These hills comprise the single largest continuous block of vacant land. Loma Linda is bordered by the cities of Redlands and San Bernardino to the north; Redlands and unincorporated San Bernardino County to the east;

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unincorporated Riverside and San Bernardino Counties to the south; and unincorporated San Bernardino County and the cities of Colton and San Bernardino to the west. The San Bernardino Mountains are located six miles to the north. A major freeway, Interstate 10, traverses the City and forms the northern boundary. A large portion of the City is dominated by open space, agricultural land and vacant and recreational land. The dominant developed land use is residential; the City is generally a suburban community with the exception of the Loma Linda University Medical Center and Loma Linda University.

The planning area for the Housing Element includes the existing City limits, which encompasses eight square miles. The City is approximately 40 percent developed, with the remainder comprising agricultural areas, open space, and vacant lands. Much of the remaining land is located in the southern hillside areas. See Exhibit 2 for general locations of the proposed Opportunity Areas for the Housing Element.

2.12 – REQUIRED CITY APPROVALS

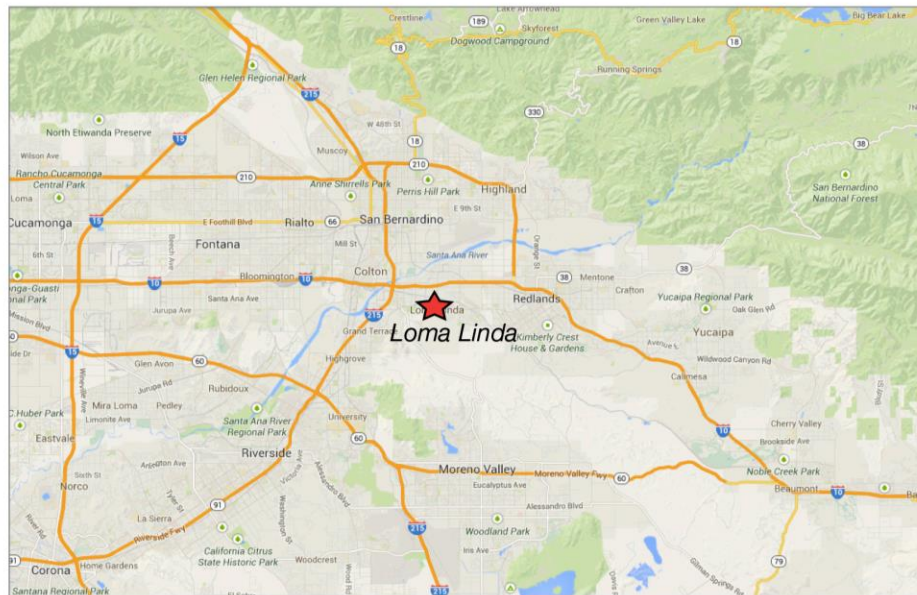
The City Council must approve a General Plan Amendment to incorporate the 2014-2021 Housing Element into the General Plan.

2.13 – OTHER AGENCY APPROVALS

The State of California, Department of Housing and Community Development (HCD) has reviewed the Housing Element for compliance with State law and has indicated that the adopted Element is in substantial compliance (Article 10.6 of the Government Code).

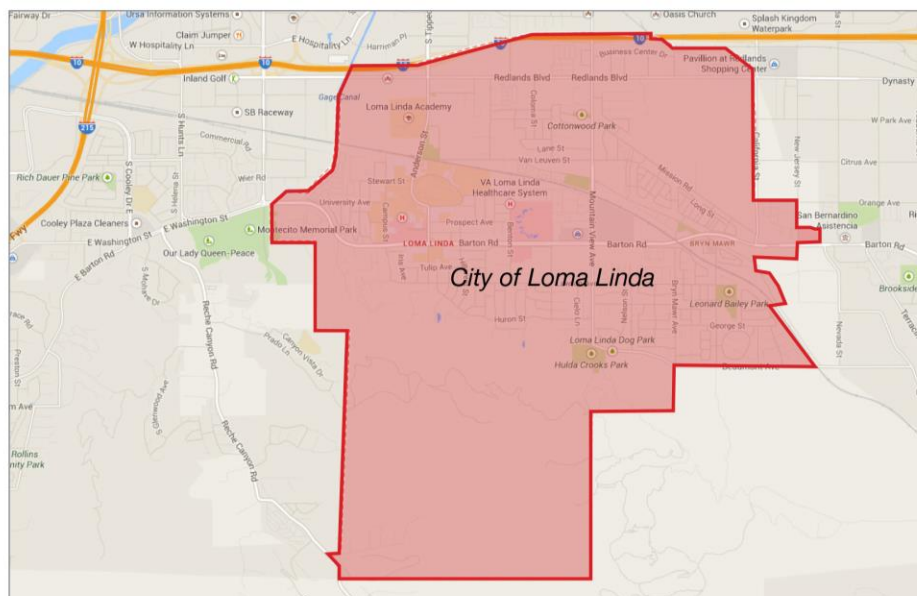
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Section 2: Project Description



Source: Google Maps

Regional



Source: Google Maps

Vicinity

Exhibit 1 Regional and Vicinity Map

City of Loma Linda Housing Element 2014-2021

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Section 2: Project Description

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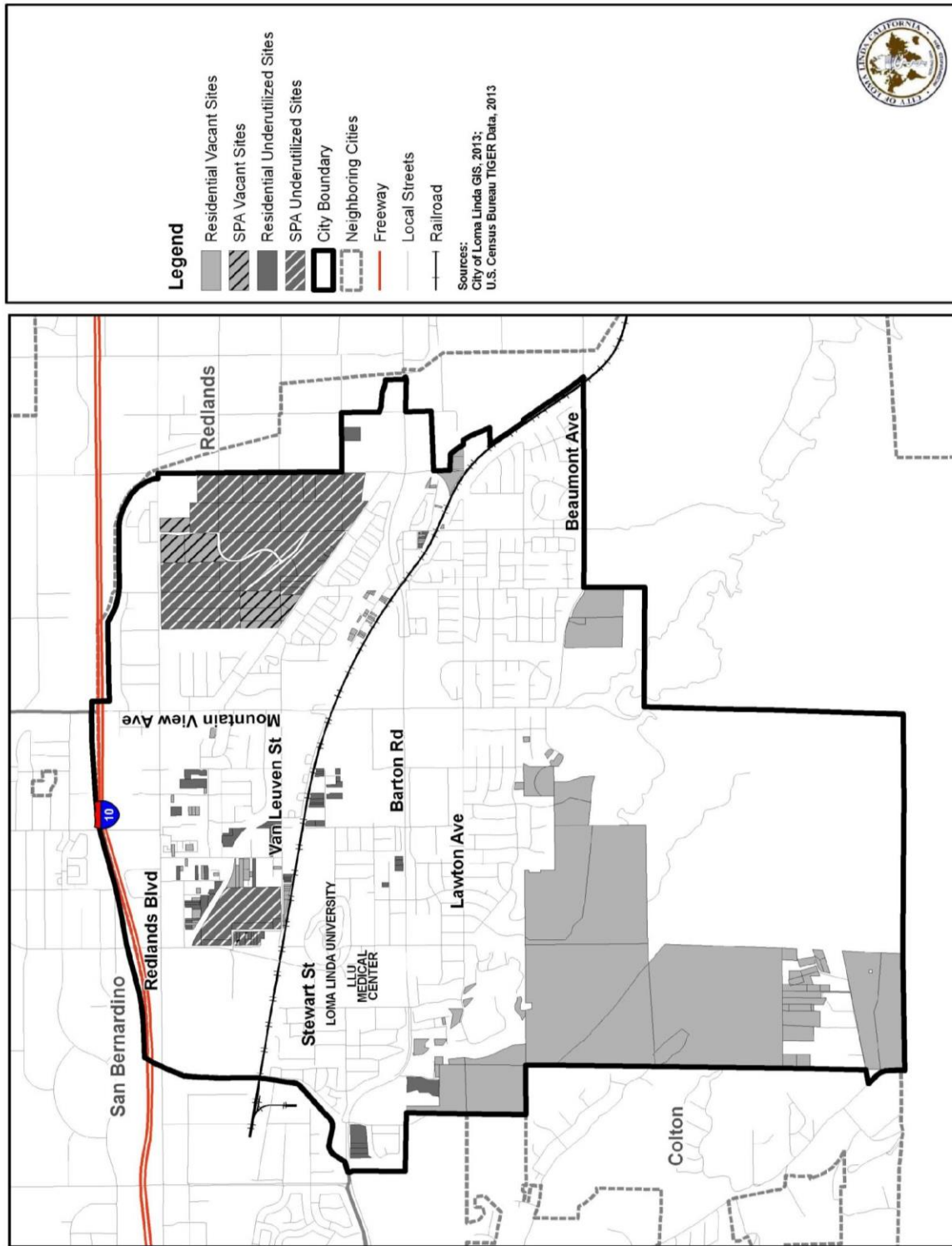


Exhibit 2 Housing Sites Inventory Map

City of Loma Linda Housing Element 2014-2021

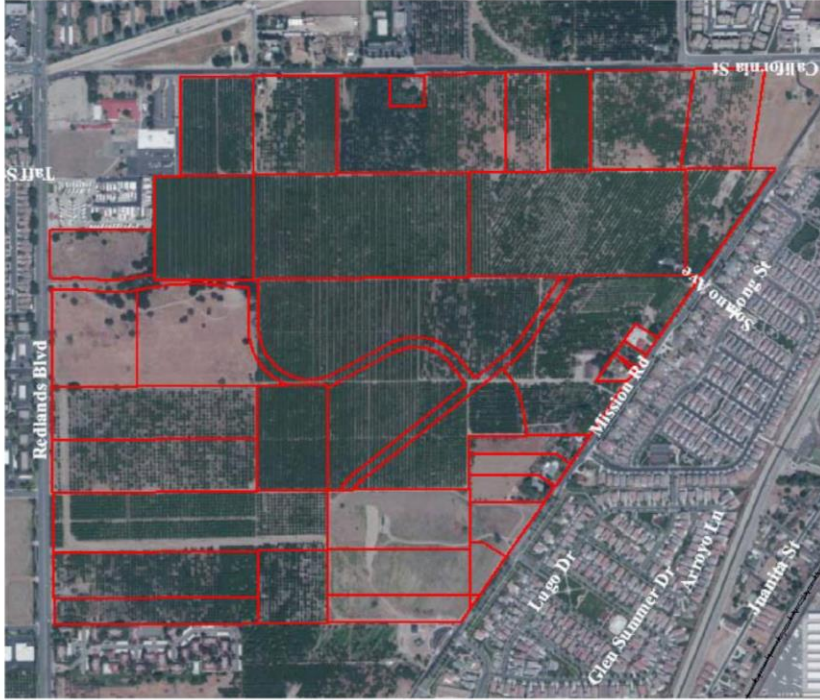
<http://www.mlgom.com> • 951-787-9222

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SPECIAL PLANNING AREA B



SPECIAL PLANNING AREA D

Exhibit 3 Special Planning Areas

City of Loma Linda Housing Element 2014-2021

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Section 3: DETERMINATION

3.1 – ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology /Soils
<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

3.2 – DETERMINATION

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Guillermo Arreola, Associate Planner
City of Loma Linda

Date

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Section 4: EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 – AESTHETICS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** A scenic vista is defined by a generally uninterrupted view of the horizon, creating an aesthetic viewpoint. Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks a vista. Second, the vista itself may be altered (i.e., development on a scenic hillside).

According to the City's General Plan EIR, the City of Loma Linda has no officially designated scenic vistas or views; however, views and landforms in general are an important element of the City, as evidenced by the Hillside Preservation Ordinance (Loma Linda Municipal Code Chapter 20.12) which was passed, in part, to preserve significant natural hillside amenities. General Plan policies recognize the importance of these views to the image of the City and provide specific guidance to the location of new development in the hillsides. The policies provide for protection of the City's natural landforms and scenic vistas.

General Plan Policies Growth Management Element Principles

Principle 1 - New development within the planning area and sphere of influence of the City of Loma Linda shall conform to City development standards that promote environmentally sensitive development designed to preserve and enhance the quality of life now experienced in the City.

Section 4: Evaluation of Environmental Impacts

Principle 2 - The hillside areas of the City of Loma Linda, its planning area and its sphere of influence are important to the community and shall be preserved in as natural a state as possible consistent with the Hillside Conservation Amendments and the standards set forth in this Chapter 2A (Growth Management Element).

Principle 3 - New developments shall be planned and constructed in a manner that preserves natural scenic vistas and protects against intrusion on the view shed areas.

Preservation of Vistas – New development shall only be approved if it preserves scenic vistas of natural hillside areas and ridgelines, which, prior to grading, are visible, or which would be visible but for man-made obstructions such as buildings or houses, from north of Barton Road, Interstate 10, or east of San Timoteo Canyon Road.

Minimization of View Shed Intrusion – New development shall only be approved if it minimizes wall surfaces facing towards view shed areas through the use of split pads, varying setbacks, low roof pitches, and landscaping.

Conservation and Open Space Element Policies

9.2.10.1 Protect views and unique landforms.

9.2.10.1.a. Preserve outstanding natural features, such as the skyline of a prominent hill, rock outcroppings, the San Timoteo Creek Aviary Sanctuary, and native and/or historically significant trees.

9.2.10.1.d. Limit development on ridgelines.

Opportunity sites located in the southwest portion of the City are adjacent to the South Hills, and if developed, could potentially impact scenic vistas in this area. An evaluation of potential impacts of development on views within the City will be conducted on a project-by-project basis. Furthermore, compliance with the General Plan policies would reduce any impacts on views and unique landforms to less than significant. No additional impacts beyond those analyzed in the General Plan EIR would occur.

- b) **No Impact.** There are no designated State Scenic Highways located within the City of Loma Linda.³ No impacts to scenic highways will occur.
- c) **Less than Significant Impact.** Future housing development could change the on- and off-site visual character of the area in which it is constructed. The City of Loma Linda is

³ California Department of Transportation. California Scenic Highway Mapping System. San Bernardino County. www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm [December 30, 2013]

approximately 40 percent built out, with the remainder comprising agricultural areas, open space, and vacant lands. Much of the remaining land is located in the City's southern hillside areas. For the developed areas of the City, the visual character is primarily suburban and institutional. Regarding the Opportunity Areas associated with the Housing Element, the changes in visual character would generally be from vacant residential to low density residential (1 du/10 ac) in the southwest portion of the City, and from agricultural uses in Special Planning Areas B and D to high-density residential uses. Future housing development guided by the policies of the proposed Housing Element will be subject to the policies of the General Plan. The Community Design Element of the General Plan provides policies that define the visual character desired for Loma Linda. Guiding and implementing policies for residential development (Community Design Element 3.1.9). The guiding policy for residential development is as follows:

- 3.1.9.1** Ensure quality of design for single-family and multifamily residential development in order to create and preserve functional and attractive residential neighborhoods that embody the strengths and accomplishments of the community and to preserve the economic investment of new and existing individual property owners.

Implementing policies listed in the Community Design Element include the following:

- 3.1.9.2.1** Where residential infill development is proposed, ensure that the scale and massing of dwellings as well as the architectural character of new development is compatible with the existing residential neighborhood.

The General Plan policies set the design standards for new development which ensure compatibility with existing development. Projects will be reviewed on a case-by-case basis for adherence to these design guidelines. Therefore, this will not result in any impacts that were not addressed in the General Plan EIR and EIR Addendum.

- d) **Less than Significant Impact.** Future housing development would result in new sources of lighting. Typical light sources from a single-family home would include outdoor security lighting. Multiple-family residential developments would generally include outdoor security lighting and parking lot lights, depending on the type of development. Future housing development will be required to conform to the lighting standards outlined in the City's Municipal Code (17.50.130 Zoning). Title 17 of the City's Municipal Code requires that artificial illumination of any structure, lot, or open area including, but not limited to, buildings, signs, parking and storage areas, shall be so installed and arranged as to direct light away from adjoining properties. The intensity of illumination provided shall be sufficiently subdued to prevent any nuisance to other properties and uses in the vicinity.

With regard to glare, building materials such as metal and other reflective materials would be a typical source associated with residential and mixed-use development. The General Plan Community Design Element includes a policy (3.1.7.2.c) that addresses glare for institutional development. The policy states that impacts to adjacent sensitive uses shall be avoided (e.g. residences, hospitals) through proper design that limits

Section 4: Evaluation of Environmental Impacts

effects from glare. Pursuant to these standards, day and nighttime views will not be adversely affected because lighting will be appropriately shielded and glare will be minimized. New development will be evaluated during the City's standard design and environmental review processes to ensure that future development complies with these standards. Therefore, the proposed policies along with project-specific design review by the City will reduce lighting and glare impacts to a less than significant level. No additional impacts beyond those analyzed in the General Plan EIR would occur.

4.2 – AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** Land designated as Prime Farmland is located in the City of Loma Linda according to the California Department of Conservation,

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Division of Land Resource Protection.⁴ Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Areas of active or recently active citrus groves exist in Loma Linda. Opportunity sites located within Special Planning Area B and D are located on Prime Farmland. The General Plan Conservation and Open Space Element identifies the preservation of agricultural land as a priority (General Plan Guiding Policy 9.5.2). However, agriculture uses within Loma Linda have declined in recent years, primarily due to the effects of urban expansion and economic considerations (General Plan Policy 9.5). The General Plan states that agricultural areas provide open space amenities and thus should be allowed to remain although not required to continue over the long term (General Plan 9.5.1).

According to the General Plan EIR, the City has always recognized that agricultural uses will transition to urban uses since incorporation, as evidenced by the fact that the original General Plan Land Use Plan (1991) does not include an agricultural land use designation even though the City contains State prime and unique farmland.

The General Plan Conservation and Open Space Element's discussion of Agricultural Resources refers to agricultural land in Loma Linda as an open space resource and amenity (General Plan 9.5.1). The General Plan Draft EIR determined that the implementation of the General Plan would result in conversion of open space areas to urban land use and that no feasible mitigation was available. Thus, the Draft EIR determined that loss of open space was significant and unavoidable (General Plan Draft EIR 4.2-12).

To determine if loss of Special Planning Areas B and D as Prime Farmland to non-agricultural, future housing units is significant, a Land Evaluation and Site Assessment (LESA) model was prepared for the SPAs (see Appendix A: LESA Model). A LESA model provides lead agencies with a method for determining the significance of agricultural land conversions through a quantitative rating system developed by the California Department of Conservation. The LESA model is developed through the weighted rating of six factors. Two Land Evaluation (LE) factors are based upon soil resource quality. Four Site Assessment (SA) factors are based upon the project site size, water resource availability, and surrounding agricultural uses. These factors are combined to achieve a score ranging from zero to 100.⁵ Based on the six LESA factors as summarized in Table 9 (Final LESA Score SPA B) and Table 10 (Final LESA Score SPA D), conversion of SPA B from an agricultural use to a non-agricultural use will result in a Final LESA Score of 55.01. Conversion of SPA D from an agricultural use to a non-agricultural use will result in a Final LESA Score of 67.02. Based on the LESA Model Scoring Thresholds, these scores indicate

⁴ California Department of Conservation. Farmland Mapping and Monitoring Program. San Bernardino County Important Farmland. 2010. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/sbd10_so.pdf [December 30, 2013]

⁵ California Department of Conservation. Land Evaluation & Site Assessment Model (LESA). http://www.consrv.ca.gov/DLRP/Pages/qh_les.aspx [January 9, 2014]

that land conversion impacts are considered significant for SPA D and not considered significant for SPA B.

Table 9
Final LESA Score SPA B

Factor	Score
<i>Land Evaluation</i>	
Land Compatibility Classification	17.5
Storie Index	18.76
<i>Site Assessment</i>	
Project Size	9.00
Water Resources Availability	9.75
Surrounding Agricultural Land Use	0.00
Protected Resource Lands	0.00
TOTAL	55.01

Source: MIG | Hogle-Ireland 2014

Table 10
Final LESA Score SPA D

Factor	Score
<i>Land Evaluation</i>	
Land Compatibility Classification	17.5
Storie Index	24.77
<i>Site Assessment</i>	
Project Size	15
Water Resources Availability	9.75
Surrounding Agricultural Land Use	0.00
Protected Resource Lands	0.00
TOTAL	67.02

Source: MIG | Hogle-Ireland 2014

The certified General Plan EIR assessed impacts related to the loss of agricultural lands and found that long-term conversion to urban uses was within the vision of the General Plan and would be a positive effect, leading to a determination that impacts would be less than significant (Impact 4.9.4.1) in spite of the results of the LESA models. The proposed Housing Element is within the context of the analysis of the certified General Plan as it includes no land use amendments that would conflict with the previous analysis; therefore, impacts will remain less than significant as determined in the certified General Plan EIR.

- b) **No Impact.** Implementation of the proposed Housing Element will not conflict with existing zoning for agricultural use or a Williamson Act contract. According to the California Department of Conservation, no land in the City is under a Williamson Act contract.⁶ The Agricultural Estates Zoning designation (A-1) provides for an

⁶ California Department of Conservation. San Bernardino County Williamson Act FY 2012/2013. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/sanbernardino_so_12_13_WA.pdf [December 31, 2013]

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orderly transition of properties from relatively open, vacant status to being developed and urbanized, this zone is established to provide for dispersed residential and agricultural uses. It is further established to ensure the maintenance of prime agricultural lands (Municipal Code 17.32). Although opportunity sites within SPAs B and D are located on land being utilized for agricultural uses, none of the opportunity sites are zoned A-1. SPA B is zoned Institutional (I) and is designated as a Special Planning Area by the General Plan Land Use Map. The southern portion of SPA D is zoned Planned Community (PC) and the western portion is zoned Single Residence (R1). The northern portion of SPA D along Redlands Boulevard is zoned East Valley Corridor Special Development. SPA D is designated as a Special Planning Area by the General Plan Land Use Map. Since the identified opportunity sites are not subject to Williamson Act contracts and are not zoned for agricultural uses, no impact would result.

- c) **No Impact.** No properties in the City are zoned for forest land, timberland, or Timberland Production as defined by Public Resources Code Section 12220(g) as *land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits*. No impact will occur.
- d) **No Impact.** Due to the urban character of Loma Linda, there is no forest land. Therefore, there will be no loss of forest land or conversion of forest land as a result of implementation of the proposed Housing Element.⁷
- e) **Less than Significant Impact.** As discussed in this Section 4.2.a, land designated as Prime Farmland is located in the City of Loma Linda, according to the California Department of Conservation, Division of Land Resource Protection. Furthermore, opportunity sites located within SPAs B and D are located on Prime Farmland. The General Plan Conservation and Open Space Element identifies the preservation of agricultural land as a priority (9.5.2); however, agricultural use within Loma Linda has declined in recent years, primarily due to the effects of urban expansion and economic considerations. While the City recognizes that agricultural areas provide open space amenities, the City does not require agricultural uses to continue in the long term (9.5.1). Opportunity sites located within SPAs B and D are not zoned for agricultural uses and are designated Special Planning Areas on the General Plan Land Use Map for long-term transition into urban uses. No forest land is located within Loma Linda. Impacts will be less than significant.

⁷ California Department of Forestry and Fire Protection. Statewide Land Cover Map. http://frap.fire.ca.gov/data/frapgismaps-landcover2006_download.php 2006.

4.3 – AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** The City of Loma Linda is located within the South Coast Air Basin (Basin) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the basin. The AQMP is a series of plans adopted for the purpose of reaching short- and long-term goals for those pollutants the basin is designated as a “nonattainment” area because it does not meet federal and/or State Ambient Air Quality Standards (AAQS). To determine consistency between the project and the AQMP, the project must comply with all applicable SCAQMD rules and regulations, comply with all proposed or adopted control measures, and be consistent with the growth forecasts utilized in preparation of the Plan.

A significant impact could occur if the proposed project conflicts with or obstructs implementation of the South Coast Air Basin 2012 AQMP. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable

Section 4: Evaluation of Environmental Impacts

air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 AQMP is affirmed when a project: 1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and 2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below.

1. The project (including potential future housing development facilitated by the Housing Element policy on proposed Opportunity Sites) implements land use policy previously analyzed in the General Plan EIR. Thus, no impacts beyond those previously identified will result from Housing Element adoption and implementation.
2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and “significant projects.” Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities. The project consists of the adoption and implementation of the proposed 2014-2021 Housing Element; therefore, consistency analysis is required.

The Housing Element identifies vacant and underutilized Opportunity Areas for future residential development. The Opportunity Areas could result in approximately 2,390 new dwelling units and 6,118 new residents (2,390 dwelling units at 2.56 persons per household). SCAG provides population projection estimates in five-year increments from 2005 to 2035. According to the latest growth forecast (2012), SCAG estimates that the City would have a population of 31,700 and the County would have a population of 2,750,000 in 2035.⁸ SCAG growth projections are utilized as the basis for both the Regional Transportation Plan (RTP) and the AQMP. Build-out of the General Plan would accommodate approximately 13,703 dwelling units, yielding a population of 32,882 persons (General Plan Land Use Element), slightly higher than projected by SCAG, and thus provides sufficient residential land uses to accommodate growth projections for the City. In addition, the proposed Housing Element and Opportunity Areas are projected to meet the City’s allocated RHNA, which is a function of the City’s projected long-term growth. Therefore, by providing sites for housing sufficient to achieve the RHNA, the Housing Element is contributing in the short term toward consistency with long-term growth projections and the 2012 AQMP. The proposed Housing Element does not propose densities higher than already permitted in the existing General Plan (which were utilized in preparation of the 2012 RTP); thus, implementation will not result in an increase in population and households over that contemplated in the RTP and AQMP. These increases are within the growth assumptions estimated by SCAG and therefore would not result in a conflict with or obstruction of the AQMP.

⁸ Southern California Association of Governments. Adopted Growth Forecast. http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_GrowthForecast.pdf [December 31, 2013]

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP; no impact will occur.

- b) **Less than Significant Impact.** Because the proposed Housing Element does not authorize any development project or land altering activity that would involve construction of new or redeveloped housing or any other development project, these amendments will not result in any direct emissions that could contribute to an existing or potential violation of an air quality standard. The proposed Housing Element would have no effect on rules and procedures governing assessment or control of air pollutant emissions.

The proposed Housing Element will not directly result in construction of any development or infrastructure; however, future residential development supported by the policies of the updated Housing Element will result in short-term criteria pollutant emissions. Short-term criteria pollutant emissions will occur during site preparation, grading, building construction, paving, and painting activities associated with new development. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). Pursuant to CEQA, short-term, construction-related emissions will be analyzed on a project-specific. Mitigation will be applied, where necessary. Such mitigation typically includes requirements for use of low-VOC paints, installation of diesel particulate filters on older construction equipment, and limitations on hauling distances and/or daily trips.

To address operational emissions from a typical development project, an air quality modeling analysis is typically performed to determine if a project could regionally or locally cause a violation of any air quality standard. Using the California Emissions Estimator Model (CalEEMod), long-term emissions from development of the Opportunity Sites identified in the Housing Element were modeled (see Appendix B, Air Quality Modeling Data). The analysis of operational emissions does not take into consideration the reduction of emissions from the demolition of existing land uses on the identified underutilized Opportunity Sites. Table 11 (Opportunity Areas Operational Daily Emissions) summarizes the operational daily emissions.

There are no established daily emissions thresholds for program-level environmental analysis. Analysis of program-level air quality impacts are assessed through consistency with the AQMP and identification of policies, regulations, and rules that will reduce pollutant emissions from future development projects. Since these emissions do not account for the net change in emissions from the demolition of existing land uses on underutilized sites, the emissions presented are a conservative or worst-case estimate. The following emissions summary is provided solely for disclosure purposes.

Table 11
Opportunity Areas Operational Daily Emissions (lbs/day)

Source	ROG	NOx	CO	SO2	PM ₁₀	PM _{2.5}
<i>Summer</i>						
Area Sources	143.66	11.84	870.59	1.92	97.62	97.59
Energy Demand	1.72	14.66	6.24	0.09	1.19	1.19
Mobile Sources	59.33	155.88	680.69	2.29	155.54	43.45
Summer Total	204.71	182.39	1,557.52	4.31	254.35	142.23
<i>Winter</i>						
Area Sources	143.66	11.84	870.59	1.92	97.62	97.59
Energy Demand	1.72	14.66	6.24	0.09	1.19	1.19
Mobile Sources	60.96	163.90	670.22	2.18	155.54	43.46
Winter Total	206.34	190.40	1,547.05	4.19	254.36	142.24

Source: MIG | Hogle-Ireland 2014

Any future proposed development project would also be subject to SCAQMD's rules and regulations. With application of SCAQMD rules, no new or more significant impacts relative to air quality standards would result from implementation of the Housing Element update than those analyzed in the General Plan EIR. Because the proposed Housing Element is consistent with the AQMP (see Section 4.3.a) and future development projects supported by the Housing Element will be subject to environmental review to ensure that daily criteria pollutant thresholds will not be exceeded, impacts will be less than significant.

- c) **Less than Significant Impact.** SCAQMD has prepared an Air Quality Management Plan to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour PM_{2.5} air quality standard, and to provide an update to the SCAQMD's commitments toward meeting the federal 8-hour ozone standards. The Basin is currently in non-attainment for State and federal criteria pollutants ozone, nitrogen dioxide and fine particulate matter (PM_{2.5} and PM₁₀).⁹

New development facilitated by the Housing Element update (pursuant to existing General Plan land use policy) will be required to comply with SCAQMD rules and regulations aimed at reducing construction-related pollutant emissions, including fugitive dust and other particulates, as well as reactive organic compounds and other ozone precursors found in paints and other coatings. Considering that the proposed Housing Element is consistent with General Plan land use policy and the breadth of existing standards and regulations, implementation of the proposed Housing Element update would not change or otherwise interfere with the regional pollutant control strategies of the AQMP. The project's impact on cumulative levels of regional ozone or particulates is therefore less than significant.

⁹ United States Environmental Protection Agency. The Green Book Nonattainment Areas for Criteria Pollutants. www.epa.gov/oar/oaqps/greenbk/index.html [May 29, 2013]

- d) **Less than Significant Impact.** Common sensitive receptors include children under age 14, the elderly over age 65, athletes, and people with cardiovascular and chronic respiratory diseases. The project promotes development of housing that could likely accommodate children and the elderly; however, the proposed Housing Element update does not authorize construction or redevelopment of any housing units. Through its standard development review process that includes review pursuant to State CEQA statutes and guidelines, the City will ensure that any future development projects developed pursuant to the proposed Housing Element provide adequate protection for residents from any local air pollution sources. Project impacts on sensitive receptors would be less than significant.
- e) **No Impact.** Residential land uses typically do not create objectionable odors. No new odor sources would result from adoption of the proposed Housing Element because it does not authorize construction of any new housing project, redevelopment of any existing property, or any particular infrastructure construction project. No impact will occur.

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4.4 – BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **Less than Significant Impact.** The northern half of Loma Linda has relatively flat topography and has been developed with residential, commercial, and institutional uses. The southern half of the City consists of undeveloped hills known as the South Hills. These hills comprise the single largest continuous block of vacant land within the City and are used for biking trails, off-road motorized vehicles, and for maintenance roads for a Southern California Edison power line easement. The southern portion of the City is not significantly disturbed by human activity. The U.S. Fish and Wildlife Service Critical Habitat Mapper identifies specific areas that are essential to the conservation of a listed species. Critical Habitat for the Coastal California gnatcatcher (*Poliophtila californica californica*) exists within the southern hills of Loma Linda.¹⁰ The gnatcatcher was listed as a threatened species in 1993. Coastal sage scrub and non-native grasslands are the dominant plant communities within this area. The General Plan Draft EIR determined that the implementation of the General Plan would cause direct loss of sensitive and critical habitat and cause habitat fragmentation resulting in isolation of sensitive habitat patches which are of limited biological value. Even after mitigation, impacts related to loss of critical habitat were determined to be significant and unavoidable.

According to the California Natural Diversity Database (CNDDB), State and federally listed threatened and endangered species were identified as potentially present within Loma Linda. A search of the San Bernardino South and Redlands Quadrangles indicated that the following species may exist: Coastal California gnatcatcher (*Poliophtila californica californica*), Least Bell's vireo (*Vireo bellii pusillus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Stephen's kangaroo rat (*Dipodomys stephensi*), Arroyo toad (*Bufo californicus*), Nevin's barberry (*Berberis nevinii*), Slender-horned spineflower (*Dodecahema leptoceras*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), California Condor (*Gymnogyps californianus*), Southwestern willow flycatcher (*Empidonax traillii extimus*), Willow flycatcher (*Empidonax traillii*), Little willow flycatcher (*Empidonax traillii brewsteri*), Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), Santa Ana sucker (*Catostomus santaanae*), and the Dehli Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*).¹¹

According to the General Plan EIR, non-listed sensitive species considered to have a moderate to high potential for occurrence in Loma Linda include Plummer's mariposa lily (*Calochortus plummerae*), Payson's jewel flower (*Caulanthus simulans*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*), Western spadefoot toad (*Scaphiopus hammondi*), Silvery legless lizard (*Anniella pulchra pulchra*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), Belding's orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*), Coastal western whiptail (*Cnemidophorus tigris multiscutatus*), Northern red diamond rattlesnake (*Crotalus exsul*), Two-striped garter snake (*Thamnophis hammondi*), Bell's sage sparrow (*Amphispiza belli*), Tri-colored blackbird (*Agelaius tricolor*), Burrowing owl (*Athene cunicularia*), California mastiff bat (*Eumops perotis californicus*), Los Angeles pocket mouse

¹⁰ U.S. Department of Fish and Wildlife. Critical Habitat Portal. <http://ecos.fws.gov/crithab/> [December 31, 2013]

¹¹ California Department of Fish and Wildlife. California Natural Diversity Database Quick Viewer. <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp> [January 3, 2014]

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(*Perognathus longimembris brevinasus*), and the Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*).¹²

No construction is proposed as part of the proposed Housing Element update. All future development will be subject to individual CEQA review that will include assessment of any potential impacts to sensitive species and their habitat. The proposed project would, therefore, not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species in local or regional plans or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The following measures included in the General Plan EIR will continue to apply to any new housing development:

4.4.4.1A. Require the preparation of biological reports in compliance with standards established by the City of Loma Linda for development related uses that require discretionary approval to assess the impacts of such development and provide mitigation for impacts to biological resources. The report must be prepared by a qualified biologist; the City Community Development Department must be notified in advance that a report will be prepared for a specific project; the report must include a signed certification attesting to the report contents, specific information as to the type of survey (e.g., General Biological Resources Assessment, Habitat Assessment, etc.), site location, and property owner. In addition, the report must include the following:

- a) Specified attachments (summary sheet, level of significance checklist, biological resources/project footprint map, and site photos);
- b) Information on literature sources (e.g., California Natural Diversity Data Base, California Department of Fish and Game, U.S. Fish and Wildlife Service, and environmental documents for nearby projects);
- c) A description of surveys, including timing, personnel, and weather conditions;
- d) A description of site conditions including plant and wildlife habitat, disturbances, and sensitive elements;
- e) An assessment of anticipated project impacts and a discussion of
- f) mitigation;
- g) A list of all species observed or detected and a recommendation for any additional focused surveys that may be necessary.

4.4.4.1B. The City establishes baseline ratios for mitigating the impacts of development related uses to rare, threatened and endangered species and their associated habitats as the following:

Preserve habitat at minimum of 1:1 replacement ratio in locations that provide long-term conservation value for impacted resource. This could involve acquisition of habitat occupied by the affected species, acquiring a key parcel that fills in a missing link or gap in a reserve that provides conservation for the species, or acquisition of credits in a mitigation bank (endorsed by the USFWS)

¹² City of Loma Linda General Plan EIR. Biological Resources p.4.4-6. 2004.

and/or CDFG) that has been established to provide conservation value for the species. Implementation of the mitigation measure shall include provisions for the preservation of such areas in perpetuity.

- b) **Less than Significant Impact.** The northern portion of the City of Loma Linda has been developed with residential, commercial, and institutional uses. Agricultural uses exist in the northern and eastern portions of the City and the southern half of the City consists of undeveloped hills. San Timoteo Creek runs southeast to northwest through the northern portion of the City and is a primary tributary to the Santa Ana River which is located one half mile northwest of the City. San Timoteo Creek has been channelized for flood control purposes and is a concrete channel with little to no natural vegetation. Mission Creek abuts the northeast corner of the City and also contains very little vegetation and riparian habitat.

Several Opportunity Sites are located in close proximity to San Timoteo Creek; however, the Loma Linda Municipal Code (13.26.160) restricts residential development within 30 feet of the center line of any creek or twenty feet of the top of a creek bank. Furthermore, San Timoteo Creek is completely channelized with concrete and therefore does not contain sensitive riparian habitat. Furthermore, Municipal Code (19.16.020) requires buffer zones to be provided adjacent to areas of preserved biological resources.

Opportunity Sites also exist within the City's southern hills, which contain areas designated as Critical Habitat for the Coastal California gnatcatcher. Most of the area in the southern hills containing Opportunity Sites is zoned Hillside Development which regulates the use, development, and alteration of land in hill areas so that essential natural characteristics such as land form, vegetation and wildlife communities, scenic qualities, and open space can be maintained (Municipal Code 17.54). Biological studies may be required in Hillside Development Areas where biological findings are found to be necessary and essential elements of the decision process (Municipal Code 19.08.030). The General Plan Land Use Designations for Opportunity Sites within the southern hills are Hillside Conservation and South Hills. Hillside Conservation which allow very low density single-family residential homes with a maximum density of one dwelling unit per 10 acres, with a potential bonus up to one dwelling unit per five acres where certain criteria are met. The South Hills designation is intended to provide for management of the City's southwestern hillside area in order to balance appropriate levels of development and increased preservation efforts. The maximum allowable density for this category ranges from zero to one dwelling unit per 10 acres for non-clustered development and one dwelling unit per two acres for clustered development.

No construction projects are proposed as part of the proposed Housing Element Update. Any future development will be subject to individual CEQA review that will require assessment of potential impacts to biological resources, including riparian habitat that could support sensitive species. Less than significant impacts will occur.

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- c) **Less than Significant Impact.** The USFWS National Wetlands Inventory does not provide any data for the City of Loma Linda.¹³ However, the General Plan EIR states that the San Timoteo wash, as well as large washes within the southern hills, are considered waters regulated by the U.S. Army Corps of Engineers and California Department of Fish and Wildlife (CDFW).¹⁴

Section 401 of the CWA requires an applicant to obtain certification for any activity that may result in a discharge of a pollutant into waters of the United States. As a result, proposed fill in waters and wetlands requires coordination with the appropriate State Regional Water Quality Control Board (RWQCB) that administers Section 401 and provides certification. The RWQCB also plays a role in review of water quality and wetland issues, including avoidance and minimization of impacts. Section 401 certification is required prior to the issuance of a Section 404 permit, as discussed below.

Under Section 404 of the CWA the U.S. Army Corps of Engineers (USACE) has jurisdiction over *Wetlands* and *Waters of the United States*. Permitting of activities that could discharge fill or dredge materials or otherwise adversely modify wetlands or other waters of the United States and associated habitat is required. Permits authorized by USACE under the Act typically involve mitigation to offset unavoidable impacts on wetlands and other waters of the United States in a manner that achieves no net loss of wetland acres or values.

The CDFW, through provisions of the Fish and Game Code Sections 1600-1603, is empowered to issue agreements (Streambed Alteration Agreements) for projects that would “divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake” (Fish and Game Code Section 1602[a]). Streams and rivers are defined by the presence of a channel bed, banks, and intermittent flow. The limits of CDFW jurisdiction are also based on riparian habitat and may include wetland areas that do not meet U.S. Army Corps of Engineers (USACE) criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

Future housing development will be subject to environmental review pursuant to CEQA and the City’s local development review procedures. This includes biological resources. Any project impacts to streams or wetlands are subject to Federal Section 401 and/or 404 permitting and State Section 1600 stream alteration requirements. These regulations require identification and mapping of any wetland resources and implementation of appropriate mitigation as discussed above to ensure no net loss of wetland area or values. Implementation of existing regulations will ensure that impacts to wetlands are less than significant.

¹³ U.S. Fish & Wildlife Service. National Wetlands Inventory. <http://www.fws.gov/wetlands/Wetlands-Mapper.html> [November 25, 2013]

¹⁴ Loma Linda General Plan EIR. 4.4 Biological Resources p. 4.4-11. 2004.

- d) **Less than Significant Impact.** The northern portion of Loma Linda is developed with residential, commercial, and institutional uses. The southern portion of the City is comprised mostly of undeveloped hillsides. The southern hills area provides critical habitat for the California gnatcatcher, as well as other species that depend on coastal sage scrub habitat. Loma Linda's southern hills are part of an extension of larger undeveloped areas including Blue Mountain and Box Springs Mountain to the southwest and the Badlands and ultimately the San Jacinto Mountains to the southeast. The southern hills connect to a core open space area for Riverside County's Multi-species Habitat Conservation Plan (MSHCP) to the south through Reche Canyon and adjacent hills. San Timoteo Creek is channelized with concrete within the City of Loma Linda and mainly serves as a corridor leading out of the City toward the Badlands.

Future development within the southern hills area of Loma Linda or in close proximity to any riparian areas will not be authorized to disrupt the hydrologic function of any waterway pursuant to local, state, and federal laws prohibiting loss or alteration of these resources; therefore, movement of wildlife and aquatic species through local riparian corridors would not be substantially impacted by future housing development. Furthermore, future housing development within the southern hills area is required to be at very low densities in order to protect sensitive habitats. The General Plan Draft EIR includes mitigation measures related to wildlife corridors. Less than significant impacts will occur.

The following measures included in the General Plan EIR will continue to apply to any new housing development:

- 4.4.4.3A.** Require all new development in the hillside areas to prepare a biological report which includes identifying local and regional habitat patterns that provide movement routes for wildlife or where opportunities exist to establish movement routes between isolated habitat patches.
- 4.4.4.3B.** Require avoidance of impacts that would eliminate, substantially constrict, or substantially inhibit wildlife movement, or acquire land that would establish movement routes between isolated habitat patches and create or restore habitat to reestablish the connection.
- 4.4.4.3C.** Where on-site habitat preservation would not provide meaningful mitigation either for affected species or for habitat connectivity, off-site mitigation shall be implemented through the acquisition of lands that provide for regional habitat connectivity. Implementation of the mitigation measure shall include provisions for the preservation of such areas in perpetuity.
- e) **Less than Significant Impact.** The General Plan Conservation and Open Space Element contains policies intended to protect biological resources. Implementation of the proposed Housing Element would not authorize construction. Any future projects will be subject to individual CEQA review. Adherence to the following General Plan policies and City ordinances will reduce impacts to biological resources.¹⁵

¹⁵ City of Loma Linda General Plan. 9.4 Biological Resources p.9-16. 2009.

The City of Loma Linda Municipal Code (Title 17, Chapter 74.120) prohibits construction of any building, structure or improvement without first providing sufficient protection, such as a fence, guard or frame, equivalent to a distance in feet from the tree equal to the trunk diameter at breast height (4.5 feet), to prevent injury to any park or street tree or landscape material in connection with such construction. Municipal Code (Title 17, Chapter 74.070) no person shall excavate within the drip line or 10 feet of a tree (whichever is greater), or install, replace, or alter any tree designated as a landmark (on private property with owner's consent) or any tree located within City parkways, (street rights-of-way), or street tree easements, without first obtaining a permit. General Plan polict 9.4.4.c below addresses the preservation of oak woodland areas within the City.

General Plan Conservation and Open Space Element Policies

9.4.4 Preserve habitats supporting rare and endangered species of plants and animals including wildlife corridors.

9.4.4.a Comply with the Federal policy of no net loss of wetlands through avoidance and clustered development. Where preservation in place is found to be infeasible (such as an unavoidable a road crossing through habitats), require 1) on-site replacement of wetland areas, 2) off-site replacement, or 3) restoration of degraded wetland areas at a minimum ratio of one acre of replacement/restoration for each acre of impacted on-site habitat, such that the value of impacted habitat is replaced.

9.4.4.b Require appropriate setbacks adjacent to natural streams to provide adequate buffer areas ensuring the protection of biological resources.

9.4.4.c Preserve, as feasible, the oak woodland areas within the City by requiring development to incorporate the trees into the development design.

9.4.4.d Through the project approval and design review processes, require new development projects to protect sensitive habitat areas, including, but not limited to, coastal sage scrub, and native grasslands. Ensure the preservation in place of habitat areas found to be occupied by state and federally protected species. Where preserved habitat areas occupy areas that would otherwise be graded as part of a development project, facilitate the transfer of allowable density to other, non-sensitive portions of the site.

9.4.4.e Through development review, retain, as feasible, wildlife corridors in the Planning Area in particular, the San Timoteo Wash area.

9.4.4.f Require the landscape design of developments adjacent to areas of preserved biological resources to avoid the use of invasive species which could negatively impact the value of the preserved resource.

9.4.4.g Cooperate with the State and Federal agencies to encourage preserving streams and creeks in the south hills area in their natural state in order to maintain their value as percolation and recharge areas, natural habitat, scenic resources, and recreation corridors. Where such preservation is not technically and financially feasible, require appropriate mitigation for the loss or modification of a creek or stream.

- f) **No Impact.** According to the Conservation Plans and Agreements Database, no Habitat Conservation Plans or Natural Community Conservation Plans apply within the planning area.^{16 17} No impact would occur.

¹⁶ U.S. Fish & Wildlife Service. Conservation Plans and Agreements Database.
http://ecos.fws.gov/conserv_plans/PlanReportSelect?region=8&type=HCP [December 31, 2013]

¹⁷ California Department of Fish and Wildlife. Natural Community Conservation Planning.
<http://www.dfg.ca.gov/habcon/nccp/> [December 31, 2013]

4.5 – CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less Than Significant Impact.** There are no sites listed on the National Register of Historic Places within Loma Linda.¹⁸ The California Office of Historic Preservation lists two Points of Interest within the City: 1) the Anson Van Leuven House and Orange Grove and 2) Mound City. The Frink Adobe is listed on the California State Historic Register. None of the Opportunity Sites are located on a property recognized by the National Register of Historic Places or the State Office of Historic Preservation.

The City lists potential Historic Districts and sites in the General Plan Conservation and Open Space Element (9.7.2). Potential historic districts include the Mission District, Campus District, Prospect/Starr District, and Bryn Mawr. With the implementation of the existing General Plan policies to preserve properties with historic potential and CEQA regulations, less than significant impacts to historic resources would occur from implementation of the project. Any future housing construction where substantial historic resources may have not yet been identified will be required to comply with City policies and practices regarding historic preservation.

General Plan Conservation and Open Space Element Policies

- 9.7.5** Preserve and protect the City's historic structures and neighborhoods. Identify and preserve the archaeological and paleontological resources in Loma Linda.

¹⁸ National Register of Historic Places. 1966-2012 Listed and Removed Properties. San Bernardino. <http://www.nps.gov/nr/research/> [January 2, 2014]

9.7.5.d Preserve significant historic structures through review of demolition permits or alterations to such structures by the Historic Commission. Permit adaptive reuse of historic landmark structures for institutional, office, or commercial uses, where improvements to the structure retain the integrity of the historic landmark.

9.7.5.f As a standard condition of approval for new development projects, require that, if cultural or paleontological resources are encountered during grading, alteration of earth materials in the vicinity of the find be halted until a qualified expert has evaluated the find and recorded identified cultural resources.

- b) **Less Than Significant Impact.** Although the northern portion of the City is highly urbanized, the presence of significant subsurface archaeological resources is always a possibility in areas where only surface inspections have taken place, such as the undeveloped southern hills area. The General Plan indicates that the Guachama Rancheria, located near the intersection of Van Leuven Street and Mission Road, is considered a highly sensitive and is likely to contain cultural resources. Opportunity Sites within SPA D are located adjacent to this historic site. However, adherence to General Plan policy 9.7.5.f and CEQA Guidelines where archaeological or paleontological resources may be affected will address impacts to unknown, buried cultural resources. Impacts will be less than significant.
- c) **Less than Significant Impact.** The City of Loma Linda is located in the southern San Bernardino Basin.¹⁹ Loma Linda lies on the north-sloping face of a ridge that runs east-west, south of San Timoteo Creek and north of Reche Canyon. Geologic mapping indicates that the City is located on late Cenozoic sediments ranging in age from mid-Pleistocene to recent. These sediments are divided into four sedimentary units with different potentials for paleontological resources. The San Timoteo Formation (QTsT) consists of sandstone and silty sandstone. The General Plan EIR indicates that the San Timoteo Formation within Loma Linda is conducive for the preservation of fossil resources and that Pleistocene older alluvium and alluvial fans have a high potential to contain paleontological resources. It is undetermined if the younger alluvial deposits located in the City have a potential to yield paleontological resources. Younger fan and wash deposits along San Timoteo Creek are determined to have a low potential to yield paleontological resources.²⁰

General Plan policy 9.7.5.f requires as a standard condition of approval for new development projects that if cultural or paleontological resources are encountered during grading, alteration of earth materials in the vicinity of the find be halted until a qualified expert has evaluated the find and recorded identified cultural resources. With adherence to this policy, impacts to paleontological resources will be less than significant.

²⁰ City of Loma Linda General Plan Draft EIR. 4.5.1 Paleontological and Cultural Resources. 2004.

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- d) **Less Than Significant Impact.** No known cemeteries or human burials have been identified on the Opportunity Sites. However, it is possible that unknown human remains could be located in the area, and if proper care is not taken during future housing project construction completed pursuant to Housing Element policy, particularly during excavation activities, damage to or destruction of these unknown remains could occur. The General Plan EIR includes the following mitigation measure relating to the discovery of human remains.

General Plan EIR Mitigation Measure 4.5.5.2A

If human remains are encountered during a public or private construction activity, State Health and Safety Code 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified within 24 hours. If the coroner determines that the burial is not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted to determine the most likely descendent (MLD) for this area. The MLD may become involved with the disposition of the burial following scientific analysis.

Impacts will be less than significant with the implementation of General Plan policies and General Plan EIR mitigation measures.

4.6 – GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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a.i) **Less than Significant Impact.** The State of California Department of Conservation indicates that an Alquist-Priolo Fault Hazard Zone is located in Loma Linda.²¹ Four faults are located within Loma Linda, including the San Jacinto Fault, Loma Linda Fault, Banning Fault, and the Reche Canyon Fault. The San Jacinto Fault Zone crosses the southwestern portion of the City. An earthquake hazard zone has been established along the trace of this fault. Investigations of the San Jacinto Fault have recommended building setbacks varying from 50 to 100 feet. The Loma Linda Fault has been mapped as crossing the northern portion of the City. The Banning Fault extends through the north eastern quadrant of the City, and the Reche Canyon Fault traverses the southwest corner of the City. Other regionally significant faults include the San Andreas, Cucamonga, Elsinore, and Newport-Inglewood. The following General Plan policies are in place to protect people and structures from the rupture earthquake faults.

General Plan Public Health and Safety Element Policies

10.1.2 Minimize the risks of property damage and personal injury resulting from seismic and geologic hazards.

- 10.1.2.a Limit development to low density in areas near geologic hazards such as the San Jacinto Fault that would create adverse conditions to those inhabiting the area and to the overall community.
- 10.1.2.b Enforce the provisions of the Alquist-Priolo Earthquake Fault Zoning Act.
- 10.1.2.c Require geologic and soils reports to be prepared for proposed development sites, and incorporate the findings and recommendations of these studies into project development requirements.
- 10.1.2.d Provide information and establish incentives such as free inspections or possibly reduced fees for property owners to rehabilitate existing buildings using construction techniques to protect against seismic hazards particularly in buildings with high occupancy such as churches and other places of assembly.
- 10.1.2.e Identify and publicize the geologic and seismic hazards within Loma Linda and advise residents and property owners of appropriate protection measures to reduce or eliminate structural damage.

Many of the proposed Opportunity Sites are located in close proximity to the identified faults. Since the San Jacinto Fault is designated as part of the State of California Alquist-Priolo Special Study Zones, site-specific geologic reports are required for development within this zone to determine the precise location of and any required setbacks from any active faults. Loma Linda Municipal Code (17.66.040) prohibits the placement of human occupancy structures on an active fault or within the area within 50 feet of an active fault. Furthermore, a geologic report is required for applications, permits, or zoning

²¹ State of California Department of Conservation. Alquist-Priolo Earthquake Fault Zone Maps. <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm> [January 3, 2014]

devices for all real estate developments and structures for human occupancy within the Geologic Hazard overlay zone (Municipal Code 17.66.050).

The proposed Housing Element does not increase any risks associated with fault rupture, as no land use policy changes are proposed which would allow development where it was not previously permitted. No changes are proposed to General Plan policies in place to protect against earthquake hazards. Future housing development constructed pursuant to Housing Element policy would be subject to all applicable City, state, and local building regulations, including the California Building Code (CBC) seismic standards as approved by the City Building & Safety Division. Impacts would be less than significant.

- a.ii) **Less than Significant Impact.** Ground shaking can vary greatly due to the variation in earth properties. The City is subject to strong ground shaking, as is the entirety of Southern California. As discussed above, an Alquist-Priolo Earthquake Fault Zone affects portions of Loma Linda, and there are multiple active and potentially active fault zones in the region. However, as with all properties in the seismically active Southern California region, all future projects would be susceptible to ground shaking during a seismic event and could expose people and structures to potentially medium to strong seismic ground motion. As such, all future projects could result in a potentially significant impact with respect to strong ground shaking.

All future, site-specific projects involving physical development of the property would be required to be in conformance with the Uniform Building Code (UBC) and other applicable standards. The proposed Housing Element will have no impact, as no physical improvements are proposed that would alter existing conditions. Nonetheless, as discussed above in Section 4.6(a)(i), all future projects would be designed and constructed in compliance with all applicable City and state codes and requirements, including those established in the California Code of Regulations, Title 24, Part 2, Volume 2. The CBC regulations are designed to protect building occupants and limit the damage sustained by buildings during seismic events. The General Plan Public Health and Safety Element contains policies to reduce seismic hazards within the City. Less than significant impact will result with the implementation of existing regulations and General Plan policies.

- a.iii) **Less than Significant Impact.** Liquefaction is a phenomenon that occurs when soil undergoes transformation from a solid state to a liquefied condition due to the effects of increased pore-water pressure. This typically occurs where susceptible soils (particularly the medium sand to silt range) are located over a high groundwater table. Affected soils lose all strength during liquefaction and foundation failure can occur. State seismic hazard maps do not show Loma Linda as an area susceptible to liquefaction.²² However, the General Plan EIR indicates two general liquefaction zones identified within northwest and southwest corners of the City (General Plan EIR Figure 4.6.2). Three groundwater basins underlie portions of the Planning Area: the northern (Bunker Hill), southwest (Reche Canyon Basin), and eastern (San Timoteo Basin). Local faults form the

²² California Department of Conservation, California Geological Survey. Information Warehouse. <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>

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boundaries of these underground water reservoirs. There is a moderate to moderately high susceptibility for liquefaction hazards in the northwest portion of the Planning Area and the southern reaches of Reche Canyon. The north-central portion of the Planning Area and a canyon extending into the western portion of the Planning Area from Reche Canyon are moderately susceptible to liquefaction hazards.²³

Proposed Opportunity Sites are located in areas identified by the General Plan EIR as having the potential for liquefaction. General Plan Public Health and Safety Element policy 10.1.2.i listed below requires specialized soils reports in areas suspected of having problems with potential liquefaction and areas depicted as liquefaction zones as shown on General Plan Figure 10.1. In addition, appropriate measures that reduce the ground-shaking and liquefaction effects of earthquakes are identified in the California Building Code, including specific provisions for seismic design of structures. The project does not itself involve new construction in any area of the City. All future development projects will be subject to the City's standard environmental review process for evaluation of geologic hazards. Considering implementation of existing policies and standards, impacts associated with liquefaction or other ground failure will be less than significant.

General Plan Public Health and Safety Element Policies

- 10.1.2.g Require that engineered slopes be designed to resist seismically induced failure.
 - 10.1.2.h Require that structures overlying both cut and fill areas within a grading operation be over-excavated to mitigate the potential for seismically induced differential settlement.
 - 10.1.2.i Require specialized soils reports in areas suspected of having problems with potential liquefaction and areas depicted as liquefaction zones as shown on General Plan Figure 10.1 (Geologic Hazards), bearing strength, expansion, settlement, or subsidence, including implementation of the recommendations of these reports into the project development.
- a.iv) **Less than Significant Impact.** Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. In general, landslides are abundant in areas underlain by shale and siltstone bedrock materials. The southern portion of the City has steep natural slopes, which are susceptible to instability. The type of instability anticipated in this area includes deep-seated landslides, surficial soil slips, wet debris flows, and surficial creep.²⁴ The following General Plan policies ensure that potential slope failure impacts resulting from future development within the City are reduced to a less than significant level.

²³ City of Loma Linda General Plan Draft EIR. 4.6 Geology and Soils p. 4.6-14. 2004.

²⁴ City of Loma Linda General Plan Draft EIR 4.6 Geology and Soils p.4.6-23. 2004.

General Plan Public Health and Safety Element Policies

10.3.2 Reduce the potential for property damage and personal injury from slope failure hazards and erosion.

10.3.2.a Limit cut and fill slopes to 3:1 (33% slope) throughout the City to maintain slope stability unless an engineering geologist can establish to the City's satisfaction that a steeper slope would not pose undue risk to people and property.

10.3.2.b Blend cut-and fill slopes with existing contours to avoid high cut slopes and steep embankments which could lead to silting of lower slopes and soil erosion.

10.3.2.c Require geologic and soils reports as part of the development review process and/or building permit process for development in the affected areas to minimize slope failure.

10.3.2.d Require erosion-control measures in areas of steep slopes or areas with high erosion problems on all grading plans to reduce soil erosion from wind, grading and construction operations, and stormwater runoff.

- b) **Less than Significant Impact.** Erosion is the condition in which surface earth materials are worn away by the action of water and wind. The project does not propose or authorize any particular housing development, infrastructure project, or other development activity or changes to land use policy associated with the adoption and implementation of the proposed Housing Element. Native topsoil is likely to occur on the Opportunity Sites located within the City's undeveloped southern hills. Opportunity Sites located in the northern portion of the City are not likely to contain native topsoil due to the developed nature of the area. SPAs B and D have historically been utilized for agricultural uses such as orange groves. Thus, topsoil on these sites has previously been disturbed. All future development projects are subject to environmental and engineering review, including assessment and mitigation of soil erosion. During construction activities of housing proposed pursuant to Housing Element policy, there is the potential to expose surficial soils to wind and water erosion during construction activities. Wind erosion is required to be minimized through soil stabilization measures required by SCAQMD Rule 403 (Fugitive Dust), such as daily watering. Water erosion will be prevented through the City's standard erosion control practices required pursuant to the California Building Code and the National Pollution Discharge Elimination System (NPDES), such as silt fencing or sandbags. Impacts related to soil erosion would be less than significant with implementation of existing regulations and General Plan policies.

General Plan Public Health and Safety Element Policies

10.3.2 Reduce the potential for property damage and personal injury from slope failure hazards and erosion.

10.3.2.a Limit cut and fill slopes to 3:1 (33% slope) throughout the City to maintain slope stability unless an engineering geologist can establish to the City's satisfaction that a steeper slope would not pose undue risk to people and property.

10.3.2.b Blend cut-and fill slopes with existing contours to avoid high cut slopes and steep embankments which could lead to silting of lower slopes and soil erosion.

10.3.2.c Require geologic and soils reports as part of the development review process and/or building permit process for development in the affected areas to minimize slope failure.

10.3.2.d Require erosion-control measures in areas of steep slopes or areas with high erosion problems on all grading plans to reduce soil erosion from wind, grading and construction operations, and stormwater runoff.

c) **Less than Significant Impact.** Impacts related to liquefaction and landslides are discussed above in Section 4.6.a. Lateral spreading is lateral displacement of gently sloping ground as a result of liquefaction in a shallow underlying deposit during an earthquake. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures. The General Plan EIR indicates that areas of liquefaction exist in the northwest and southwest corners of the City. Thus, lateral spreading could occur in these areas. According to the General Plan EIR, ground subsidence may occur as a response to natural such as earthquake movements, which can cause abrupt elevation changes of several feet. General Plan policy 10.1.2.c requires geologic and soils reports to be prepared for proposed development sites, and requires the incorporation of any findings and recommendations into project development requirements. Furthermore, the CBC requires all new development to have a site-specific geology report prepared by a registered geologist or soils expert and submitted to the City, which would ensure impacts related to expansive soils would be evaluated on a project-by-project basis and mitigated as necessary. Compliance with the policies of the General Plan and the Building Code would ensure potential impacts would be reduced to a less than significant level.

d) **Less than Significant Impact.** Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly and can cause structural damage to building and infrastructure if the potentially expansive soils were not considered in project design and construction. Compaction of loose soils and poorly consolidated alluvium occur as a result of strong seismic shaking. Amount of compaction may vary from a few inches to several feet and may be significant in areas of thick soil cover. Topsoil, recent alluvium and weathered bedrock are typically porous and may be subject to hydro-collapse; therefore, these materials can be unsuitable for the support of engineered fills and structures.

The City is underlain by several different soil types including Hanford sandy loam (0-2% slopes), San Emigdio fine sandy loam (0-2% slopes), San Emigdio gravelly sandy loam (2-9% slopes), San Emigdio fine sandy loam (2-9% slopes), Ramona sandy loam (9-15% slopes), Hanford coarse sandy loam (2-9% slopes), Greenfield sandy loam (9-15% slopes), San Timoteo loam (30-50% slopes), San Emigdio sandy loam (9-15% slopes), Saugus sandy loam (30-50% slopes), Metz coarse sandy loam (2-9% slopes), Tujunga gravelly loamy sand (0-9% slopes), and Hanford coarse sandy loam (9-15% slopes). Soils within the City exhibit a low shrink-swell potential and are not likely to be expansive.²⁵ General Plan policies require geologic and soil reports to be prepared for proposed developments. As such, potential impacts associated with expansive soils would be less than significant.

- e) **Less than Significant Impact.** Wastewater (sewer) facilities within the City of Loma Linda are operated and maintained by the City's Department of Public Works, Utilities Division. However, several small areas of the City not connected to the City's sanitary sewer system rely on private septic systems. These areas include the southwestern portion of the City and two incorporated areas not addressed in the Housing Element.²⁶ General Plan policy only allows new septic systems to be installed for low-intensity uses and where sewer connections are infeasible (General Plan policy 8.8.2.1.e and 8.8.2.1.f). Developments and septic systems where sewers are not now available would be subject to the review and requirements of the City of Loma Linda septic system design and operation, as well as the Santa Ana Regional Water Quality Board requirements to assure that the system and soils would allow for adequate percolation of septic treated wastewater. With the implementation of existing septic system regulations, impacts will be less than significant.

²⁵ City of Loma Linda General Plan Draft EIR. Geology and Soils p.4.6-3. 2004.

²⁶ City of Loma Linda General Plan. Public Services and Facilities Element p.8-19. 2009.

4.7 – GREENHOUSE GAS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** Climate change is the distinct change in measures of climate for a long period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas emissions all over the world. Natural changes in climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of greenhouse gases (GHG) and changes to the planet's surface. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices.²⁷

Greenhouse gases differ from other emissions in that they contribute to the "greenhouse effect." The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Greenhouse gases occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

²⁷ United States Environmental Protection Agency. *Frequently Asked Questions About Global Warming and Climate Change. Back to Basics*. April 2009.

No new development is associated with the proposed Housing Element. As such, the proposed Housing Element would not generate greenhouse gas emissions either directly or indirectly.

GHG emissions for the buildout of the Opportunity Areas facilitated by the Housing Element were quantified utilizing the California Emissions Estimator Model (CalEEMod) version 2013.2.2 to determine if the project could have a cumulatively considerable impact related to greenhouse gas emissions (see Appendix B, Air Quality Modeling Data). The CalEEMod data is presented for informational purposes only, as the changes to permissible development densities occurring as part of the Housing Element update will not result in an increase over that contemplated in the RTP and AQMP. No new development or changes to land use policy are associated with the proposed Housing Element. A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin has not officially been adopted by the SCAQMD. Individual projects may be required to have a greenhouse gas emissions inventory prepared to determine if individual projects exceed applicable screening or impact thresholds and would thus potentially contribute substantially to climate change and associated impacts. A summary of short- and long-term emissions and the analysis for each are included below.

Short-Term Emissions

Future development projects will result in short-term greenhouse gas emissions from construction. Greenhouse gas emissions will be released by equipment used for demolition, grading, paving, and other building construction activities. GHG emissions will also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends that construction emissions be amortized over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory.

Typically, construction-related GHG emissions contribute insubstantially (less than one percent) to a project's annual greenhouse gas emissions inventory and mitigation is not effective in reducing a project's overall contribution to climate change. Implementation of AB32 and SB375 through California Air Resources Board's (ARB) Scoping Plan and SCAG's RTP/SCS are designed to achieve the required reduction in greenhouse gas emissions, as is further discussed in Section 4.7.b. With the cooperation and support of these plans, short-term climate change impacts due to future construction activities will not be significant.

Long-Term Emissions

Future development projects will result in continuous GHG emissions from mobile, area, and other operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO₂, with minor emissions of CH₄ and N₂O. The most significant GHG emission from natural gas usage will be

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methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO₂ emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for typical development projects.

Table 12 (Greenhouse Gas Emissions Inventory) summarizes annual operational greenhouse gas emissions from build-out of the proposed Housing Element Opportunity Areas. There is no adopted threshold promulgated by SCAQMD or CARB for assessment of program-level GHG emissions. Analysis of program-level climate change impacts are assessed through consistency with State and regional greenhouse gas emissions reduction plans is provided in Section 4.7.b.

Table 12
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO ₂	CH ₄	N ₂ O	TOTAL*
Area	716.74	0.92	0.0095	738.91
Energy	7,214.59	0.25	0.10	7,249.56
Mobile	26,039.39	0.90	0.00	26,058.27
Waste	418.60	24.74	0.00	938.12
Water	941.75	5.12	0.13	1,088.94
TOTAL	35,331.08	31.92	0.23	36,073.79

Source: MIG | Hogle-Ireland 2014

* MTCO₂E/YR

Future housing and mixed-use development will occur on vacant land as well as replace existing underutilized uses. The analysis of operational emissions does not take into consideration the reduction of emissions from the demolition of existing land uses on the identified underutilized Opportunity Areas. Therefore, actual net emissions that accounts for the reduction in emissions from removal of existing uses would be lower than the emissions presented in Table 12. These reductions would be quantified on an individual project basis based on existing site conditions and land uses at the time of redevelopment. In addition, Table 12 does not account for regulatory and project design features required as mitigation that may reduce GHG emissions for each individual project. GHG emissions reducing design requirements identified in the CBC include installation of low-flow fixtures, compliance with State landscape irrigation requirements, and minimum 50 percent recycling during construction and operation. Furthermore, GHG emissions will be evaluated during the City's standard environmental review process as required by CEQA to determine if GHG emissions from individual projects will require mitigation.

Since future development projects supported by the proposed Housing Element will be consistent with State and regional greenhouse gas reduction plans (see Section 4.7.b), they will be subject to environmental review to ensure that any interim or adopted project-level greenhouse emissions threshold is not exceeded, and is subject to

regulations requiring reduction of greenhouse gas emissions. Impacts will be less than significant.

- b) **Less than Significant Impact.** Significant impacts would occur if the proposed project conflicted with or interfered with implementation of any existing GHG reduction plan that is projected to achieve greenhouse gas reduction targets. The two primary reduction plans are California Air Resources Board (CARB) Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as discussed below.

California Air Resources Board Scoping Plan (AB32)

The CARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.²⁸ CARB estimates that implementation of these measures will reduce GHG emissions in the state by 136 MMTCO₂E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target of 80 MMTCO₂E, which is a reduction of 27 percent compared to the projected business as usual 507 MMTCO₂E.

Many of the strategies identified in the Scoping Plan are not applicable at the General Plan or project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project, such as provision of mixed-use developments. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. **California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions.** Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.²⁹ Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms. These programs involve capping emissions from electricity generation, industrial facilities, and broad-scoped fuels. The project does not involve any such uses.
2. **California Light-Duty Vehicle Greenhouse Gas Standards.** Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals. This is not applicable as this is a statewide measure establishing vehicle emissions standards.

²⁸ California Air Resources Board. Climate Change Scoping Plan. December 2008.

²⁹ California Air Resources Board. California GHG Emissions – Forecast (2002-2020). October 2010.

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3. **Energy Efficiency.** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). The Housing Element promotes energy-efficient building design, as well as implementation of existing building and other codes regulating minimum energy, water, and waste efficiency consistent with 2011 CALGREEN requirements and would thus be consistent and not interfere with this program.
4. **Renewables Portfolio Standards.** Achieve 33 percent renewable energy mix statewide by 2020. This establishes the minimum statewide renewable energy mix and is not applicable at a City level or below for implementation. The proposed Housing Element would not interfere with the implementation of this program.
5. **Low Carbon Fuel Standard.** Develop and adopt the Low Carbon Fuel Standard. This is not applicable to a city as this establishes reduced carbon intensity of transportation fuels.
6. **Regional Transportation-Related Greenhouse Gas Targets.** Develop regional greenhouse gas emissions reduction targets for passenger vehicles. As is detailed below, the proposed General Plan Amendments would not conflict with and would support the implementation of SCAG's RTP/SCS to achieve the required GHG reduction goals by 2020 and 2035 based on consistency with growth projections. The Loma Linda General Plan includes policies to reduce vehicle miles traveled by encouraging mixed-use, infill, an improved jobs-housing balance, and alternative modes of transportation.
7. **Vehicle Efficiency Measures.** Implement light-duty vehicle efficiency measures. This is not applicable to a city as this identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
8. **Goods Movement.** Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. The proposed Housing Element will not result in the development of uses that will involve the movement of goods and therefore would not interfere with eventual implementation.
9. **Million Solar Roofs Program.** Install 3,000 megawatts of solar-electric capacity under California's existing solar programs. Sets goal for use of solar systems throughout the state. The proposed Housing Element would not interfere with but instead would directly support installation of alternative energy sources through City policies and programs.
10. **Medium- and Heavy-Duty Vehicles.** Adopt medium-duty (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling

trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.³⁰ Future, yet to be determined improvements, includes hybridization of MD and HD trucks. The proposed Housing Element will not result in development of industrial uses and therefore would not interfere with implementation of this program.

11. **Industrial Emissions.** Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries. These measures are applicable to large industrial facilities (> 500,000 MTCO₂E/YR) and other intensive uses such as refineries. The proposed Housing Element will not result in the development of these facilities and therefore would not interfere with implementation.
12. **High Speed Rail.** Support implementation of a high speed rail system. This is not applicable as the proposed Housing Element has no bearing on high speed rail facilities.
13. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The Housing Element promotes energy efficient building design as well as implementation of existing building and other codes regulating minimum energy, water, and waste efficiency consistent with 2011 CALGREEN requirements and would thus be consistent and not interfere with this program. The proposed Housing Element does not pertain to new building projects or building strategies and would not interfere with any green building programs.
14. **High Global Warming Potential Gases.** Adopt measures to reduce high global warming potential gases. The proposed Housing Element would not directly result in generation of high global warming potential gases, and would not interfere with implementation of any future changes in air conditioning, fire protection suppressant, or other emission requirements.
15. **Recycling and Waste.** Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling to move toward zero-waste. The proposed Housing Element is consistent because implementing housing development will be required to comply with goals to recycle a minimum of 50 percent from construction activities per State requirements.
16. **Sustainable Forests.** Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO₂E/YR. The proposed Housing Element will not result in the

³⁰ California Air Resources Board. Scoping Plan Measures Implementation Timeline. October 2010.

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development of uses that remove any forest areas and therefore would not interfere with forest sequestration.

17. **Water.** Continue efficiency programs and use cleaner energy sources to move and treat water. The proposed Housing Element is consistent since implementing development will include use of low-flow fixtures and water-efficient landscaping per State and local requirements.

18. **Agriculture.** In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. The proposed Housing Element does not involve any agricultural activity.

As summarized above, the proposed Housing Element will not conflict with Regional Transportation-Related GHG targets or any of the other provisions of the Scoping Plan. The proposed Housing Element in fact supports four of the action categories through energy efficiency, green building, recycling/waste, and water conservation through these proposed and current policies.

Regional Transportation Plan/Sustainable Communities Strategy (SB375)

The 2012 Regional Transportation Plan/Sustainable Communities Strategy and the goals, policies, and programs included within it are projected to obtain and exceed applicable GHG reduction targets of eight percent by 2020 and 13 percent by 2035. Projected reductions by the RTP/SCS are nine percent by 2020 and 16 percent by 2035. Ultimately, the RTP/SCS is keyed to implement the requirements of AB32 at the regional level. For a program-level analysis, if the proposed Housing Element is consistent with the assumptions of the RTP/SCS, then long-term development within the planning area will meet regional reduction targets. Furthermore, long-term development would meet the broader statewide reduction goals of 1990 levels by 2020 and 80 percent beyond that by 2050. The proposed Housing Element would, therefore, not contribute substantially to climate change impacts if it is consistent with the regional and statewide climate change planning efforts.

As assumed in the RTP/SCS, based on current City boundaries, Loma Linda is forecast to grow to a total population of 26,700 by 2020 and 31,700 by 2035. The ultimate build-out of the General Plan land use plan can accommodate approximately 13,703 dwelling units for a total population of 32,882, which would accommodate the long-term projected growth. In addition, the proposed Housing Element and Opportunity Areas are projected to meet the City's allocated RHNA for short-term growth, which is a function of the City's projected long-term growth. Therefore, by providing sites to accommodate the RHNA, the Housing Element is contributing short-term towards consistency with long-term growth projections and the RTP/SCS. The existing General Plan and proposed Housing Element are consistent with the population growth forecasts of the RTP/SCS because they provide the capacity for residential development to accommodate the projected population growth and not direct growth elsewhere, which would interfere with implementation of the RTP/SCS. Impacts will be less than significant.

4.8 – HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a-b) **Less than Significant Impact.** The Loma Linda Housing Element is a policy document intended to facilitate maintenance of the existing housing stock and production of new housing to meet the targeted housing needs of the community. Residential development does not require and is not expected to require the manufacturing, use, transportation, disposal, or storage of dangerous quantities of hazardous materials. Residential uses do not generate hazardous wastes or emissions, except for very small quantities of typical household cleaning agents, automotive maintenance products, paints, pesticides, and herbicides. The proposed Housing Element would not conflict with any hazardous materials regulations and would not exempt any future development from the City's programs to control and safely dispose of hazardous materials and wastes or to reduce the volume of wastes requiring landfill disposal. Thus, no impact will result.

With regard to construction, due to the northern portion of the City being developed, housing development pursuant to Housing Element policy will likely involve demolition of existing structures. SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including the removal and disturbance of asbestos containing materials (ACM). This rule is generally designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires surveys of any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable ACM. Rule 1403 also establishes notification procedures, removal procedures, handling operations, and warning label requirements, including HEPA filtration, the glovebag method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of ACM (more than 100 square feet of surface area). All future housing developments will be subject to the City's standard environmental review process for evaluation of hazards. Considering implementation of existing policies and standards, impacts associated with asbestos hazards will be less than significant.

Exposure of construction workers to lead-based paint during demolition activities is also of concern, similar to exposure to asbestos. Exposure of surrounding land uses to lead from demolition activities is generally not a concern because demolition activities do not result in appreciable emissions of lead. If lead contamination exists on future housing sites, 8 CCR Section 1532.1 (California Construction Safety Orders for Lead) is applicable

to the demolition of all existing structures requiring exposure assessment and compliance measures to keep worker exposure below action levels. The project is also subject to Title 22 requirements for the disposal of solid waste contaminated with excessive levels of lead. Impacts due to lead exposure and contamination will be less than significant with adherence to existing regulations.

There is a long history of agriculture production in portions of the Loma Linda area. These agricultural activities typically included periodic applications of pesticides and herbicides. Pesticides and herbicides vary in toxicity and persistence in the soil. Pesticides, which degrade slowly overtime, may leave undesirable residues on crops or in the soil, resulting in higher levels of pesticides in the food chain. Other pesticides are easily degraded, and, therefore, do not contaminate top soils or threaten groundwater supplies.³¹ Any housing constructed on land previously used for agriculture will be assessed for pesticide hazards on a project-by-project basis pursuant to CEQA prior to development. Impacts due to pesticides exposure will be less than significant with adherence to individual project analysis required by CEQA.

- c) **No Impact.** No specific new development is associated with the proposed Housing Element. Since a large number of Opportunity Sites are located throughout the City of Loma Linda, schools are likely to be located within one-quarter mile. However, future residential development that may be facilitated by this Housing Element update would not generate hazardous air emissions and would not involve the handling of any acutely hazardous substances or wastes. Thus, the updated Housing Element would not result in impacts related to the presence of any hazardous materials or emissions within one quarter mile of a school. No impact would occur.
- d) **Less than Significant Impact.** According to the databases maintained as the Cortese List, no sites in Loma Linda are identified on the Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List or the State Water Resources Control Board (SWRCB) list of cleanup sites.³² There is one open leaking underground storage tank (LUST) identified by the SWRCB GeoTracker database within the City. Bear Oil Co./Former Texaco (T0607100598) is located at 24913 Redlands Boulevard. A site assessment was initiated in 2006 to evaluate the potential contaminants of concern (gasoline) to the underlying aquifer. Since the LUST case is open, remediation of the existing hazards is taking place or will occur in the future and potential impacts to future residential development will be diminished. Any future development will be subject to the City's standard environmental review that will include identification of any contaminated site possibly not already identified and implementation of appropriate cleanup and disposal procedures; therefore, less than significant impacts related to contaminated sites will occur. This is consistent with the policies of the General Plan Safety Chapter. The Updated Housing Element and associated amendments propose no changes to these safety measures. Impacts will be less than significant.

³¹ City of Loma Linda General Plan Draft EIR. Hazardous Materials and Fire Hazards p.4.7-3. 2004.

³² California Environmental Protection Agency. Cortese List Data Resources/
www.calepa.ca.gov/SiteCleanup/CorteseList/ [January 6, 2014]

General Plan Public Health and Safety Element Policies

- 10.5.2** Minimize the negative impacts associated with the storage, use, generation, transport, and disposal of hazardous materials.
- 10.5.2.b** Continue a program of regular inspections and monitoring to ensure compliance with local, State, and Federal regulations, in order to reduce the risks associated with the use and handling of hazardous materials and wastes.
- 10.5.2.c** Continue a program of regular inspections and monitoring to ensure compliance with local, State, and Federal regulations, in order to reduce the risks associated with the use and handling of hazardous materials and wastes.
- 10.5.2.e** Where applicable, identify and regulate appropriate regional and local routes for transportation of hazardous material and hazardous waste by maintaining formally designated hazardous materials routes away from populated and other sensitive areas and restricting all processors and new large generators to access only along established material carrier routes.
- 10.5.2.h** Maintain a “Hazardous Materials” ordinance to define siting criteria to be used for various types of facilities, requirements for application submittal, and required finds for approval.
- 10.5.2.i** Locate hazardous materials facilities at a sufficient distance from populated areas to reduce potential health and safety impacts by requiring risk assessment studies to determine potential health impacts for all proposed hazardous waste processors and large generators as part of permit application submittals.
- e) **No Impact.** There are no airports in Loma Linda. The closest airport is the San Bernardino International Airport and Trade Center (SBIA), located 1.5 miles from the northern boundary of the City. This airport does not offer commercial flights. Portions of Loma Linda fall within the two-mile radius considered to be within the airport influence area. The City’s General Plan Public Health and Safety Element includes an Airport Influence Area Map for the SBIA (General Plan Figure 10.4). Opportunity Sites are located within the established Airport Influence Area; however, the majority of the Opportunity Sites are located south of the airport influence area. For planning purposes, federal and State laws have established well-defined regulations for acceptable noise levels with the basic criterion set at a maximum 65 decibel (dB) Community Noise Equivalent Level (CNEL) value. According to the Airport Layout Plan Narrative Report

for the SBIA, all Opportunity Sites are located outside of the 65 decibel (dB) Community Noise Equivalent Level (CNEL) noise contour.³³

Ontario International Airport (ONT) is located approximately 20 miles to the west. Riverside Municipal Airport is located approximately 13 miles to the southwest. There are also two general aviation airports in the area, one to the northwest in Rialto and the second to the east in Redlands. Impacts will be less than significant.

General Plan Public Health and Safety Element Policies

10.7.2 Support the San Bernardino Airport Land Use Commission.

10.7.2.a Participate in the development of the Airport Land Use Plan.

10.7.2.b Upon adoption of the Airport Land Use Plan, adopt an overlay zone for the area which specifies the criteria included in the Plan for the airport influence area.

- f) **Less than Significant Impact.** No private airstrips were identified within the vicinity of the City of Loma Linda. The Jerry L. Pettis Memorial Medical Center and the Loma Linda University Medical Center operate helipads on the roof of each hospital. The hospitals and the County of San Bernardino Sheriff's Search and Rescue Division use these helipads. Flights to the hospitals average one to two per day primarily between 3:00 P.M. and midnight. The Search and Rescue Division uses the helipads only on an as-needed basis, generally averaging one flight a month.³⁴ Impacts will be less than significant.
- g) **Less than Significant Impact.** The proposed Housing Element and General Plan Amendments would not change or interfere with the emergency response plans of the City, and the project components do not propose any alteration to vehicle circulation routes that could interfere with such plans. In accordance with City policies, the City will review all development proposals to determine the possible impacts of each development on emergency services. Impacts will be less than significant.
- h) **Less than Significant Impact.** The City of Loma Linda is susceptible to wildland fires due to the steep terrain and highly flammable chaparral vegetation of the South Hills area and high winds that correspond with seasonal dry periods. The characteristics of the South Hills and winds in the area indicate that large uncontrollable fires on a recurring basis are inevitable. The South Hills have experienced wildfires in the following recent years: 2001, 2000, 1999, and 1998. Southern Loma Linda is located within a Very High Fire Hazard Severity Zone (VFHSZ), as documented on the latest

³³ Airport Layout Plan Narrative Report for the San Bernardino International Airport. Exhibit 4H. Coffman Associates, Inc. November 2010.

³⁴ City of Loma Linda General Plan. Noise Element p.7-6. 2009.

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maps prepared by the California Department of Forestry and Fire Protection.³⁵ Opportunity Sites located in the southern portion of the City in the southern hills area are located within the Very High Fire Hazard Severity Zone (VHFHSZ). Construction of residences within Very High FHSZs will be required to comply with California Building Code requirements for fire protection in areas prone to wildfires, in particular Section 701A that will require construction with fire resistant materials and methods to minimize property damage. Fire protection services would also continue to be provided for residences in the City and is further discussed in Section 4.14. With the implementation of existing General Plan Policies, building code requirements and adequate fire protection services, impacts from wildfire on future development pursuant to the policies of the General Plan amendments would be less than significant.

General Plan Public Health and Safety Element Policies

- 10.4.2** Minimize the threat to persons, property, and the environment resulting from wildfires.
- 10.4.2.a** Require fire protection agency review of all development in high fire risk areas and minimize risks accordingly.
- 10.4.2.b** Require new development in areas of high wildfire hazard to utilize fire-resistant building materials. As appropriate, require on-site fire suppression systems, including, automatic sprinklers, buffers and fuel breaks, and fire retardant landscaping.
- 10.4.2.c** Require detailed fire prevention and control measures, including, community firebreaks, for development projects in high fire hazard zones.
- 10.4.2.d** Require fire sprinklers in all structures greater than 200 square feet.
- 10.4.2.e** Prohibit single-access neighborhoods in high fire hazard areas. Provide adequate access for fire and other emergency response personnel and vegetation management programs.

³⁵ California Department of Forestry and Fire Protection. Fire Hazard Severity Zones Maps. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php [December 6, 2014].

4.9 – HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** The project is a policy document that facilitates the production of housing and does not include any components that would change or conflict with water quality regulations or any waste discharge standards. All new development projects must comply with the City's local procedures to control storm water runoff to prevent violations of regional water quality standards, in accordance with its co-permittee obligations under the countywide municipal storm water permit program, a component of the NPDES program of the federal Clean Water Act. All future development must connect to sewer or proved approved septic systems; direct discharges of wastewater to surface or ground waters would not be permitted. A less than significant impact will occur with the implementation of these existing requirements and procedures.
- b) **Less than Significant Impact.** If the project removed an existing groundwater recharge area or substantially reduced runoff that results in groundwater recharge, a potentially significant impact could occur to well production. Three groundwater basins underlie the City: Bunker Hill, Reche Canyon, and San Timoteo. The northern portion of Loma Linda overlies the Upper Santa Ana Valley Groundwater Basin, Bunker Hill Subbasin. This basin consists of the alluvial materials that underlie the San Bernardino Valley. Recharge to the Bunker Hill Basin historically has resulted from infiltration of runoff from the San Gabriel and San Bernardino Mountains. The Santa Ana River, Mill Creek and Lytle Creek contribute more than 60 percent of the total recharge to the ground-water system. Lesser contributors include Cajon Creek, San Timoteo Creek, and most of the creeks flowing southward out of the San Bernardino Mountains such as East Twin Creek. The subbasin is also replenished by deep percolation of water from precipitation and resulting runoff, percolation from delivered water, and water spread in streambeds and spreading grounds. Total groundwater storage of the Basin is 5,976,000 acre-feet, while as of 1998 the total amount of water in the Basin was 5,890,300 acre-feet. Loma Linda gets one hundred percent of its water from the Bunker Hill Basin.

The City of Loma Linda obtains all of its water from five groundwater wells in the Bunker Hill Basin, which is considered a reliable source of water.³⁶ The City of Loma Linda groundwater is supplied from five wells, all located in the Bunker Hill Basin. Reche Canyon Basin underlies the southwest portion of the City and the San Timoteo Basin underlies the southeast portion of the City. The groundwater basins in the southern portion of the City do not generally consist of good water-bearing deposits, and very few wells are known to exist in those areas.

The proposed project is comprised of policies that would not authorize any specific development project or change any existing land use policies regulating location or intensities of uses, nor would it result in installation of any groundwater wells, and would not otherwise result in a direct withdrawal of groundwater. Future development is not anticipated to substantially interfere with groundwater recharge because the City requires that storm water run-off in excess of existing conditions be directed to retention basins where the water will percolate into the ground, thereby recharging subsurface aquifers. Impacts related to groundwater recharge and depletion will be less than significant.

General Plan Conservation and Open Space Element Policies

- 9.6.2** Water quality and availability are critical to the current and future residents of the City of Loma Linda, its planning area, and its sphere of influence. No new development shall be approved that endangers the quality or quantity of water delivered to households within the City.
- 9.6.2.a** No development project shall be approved which would cause the quality of water delivered to Loma Linda households to fail to meet State and/or Federal water quality standards, or which would cause an increase in residential rates, or which would result in a restriction of water usage, except for those projects exempt under State and/or Federal law.
- 9.6.2.b** Develop and encourage the implementation of water conservation programs by residents, employers, students, and service providers.
- 9.6.2.c** Participate with State and regional agencies to monitor groundwater supplies and take steps to prevent overuse, depletion, and toxicity.
- 9.6.2.e** Through the development review process require that water supply capacity is available or will be available prior to approval of a development project. Do not approve projects for which assured water supply is not available.
- 9.6.2.f** Pursue the use of reclaimed water for the irrigation of all appropriate open space facilities and City projects, and encourage existing and new developments to tie to the reclaim water system when available and recommended by the San Bernardino Municipal Water Department (wastewater provider) to reduce demand on municipal water supplies.

³⁶ City of Loma Linda General Plan. Conservation and Open Space Element p.9-22. 2009.

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9.6.2.g Through the development review process, encourage water conservation in all new and rehabilitated development through the use of water conserving fixtures in all new residential and commercial development.

- c) **Less than Significant Impact.** The northern portion of Loma Linda is largely developed with the southern portion consisting of undeveloped hills. Wind and water both cause erosion that could be deposited in local or regional washes and other water bodies. Development of the Opportunity Sites may alter the existing localized drainage patterns and increase the amount of impervious surfaces through the development of vacant properties. Any new development would be required to size storm water drainage facilities appropriately.

The topography of the South Hills area makes erosion and sedimentation an important issue for the City. Erosion on steep or graded slopes especially in the southern portion of the City where Opportunity Sites are located can contribute to slope failure hazards. However, the City does have a Hillside Conservation (Municipal Code 20.12) land use designation and a Hillside Development zoning district (Municipal Code 17.54) to regulate development that would alter slopes in these areas. Any impact to the drainage pattern and potential erosion hazards would be mitigated on a project by project basis by adherence to the NPDES requirements as well as the City's Municipal Code, which includes provisions for on-site water retention. Additionally, the General Plan contains methods to reduce erosion through policies related to the protection of drainage systems. Impacts related to erosion and siltation will be less than significant.

General Plan Public Health and Safety Element Policies

- 10.2.3.b** In areas where local and sub-regional drainage facilities are not currently provided, require new development to prepare hydrologic studies to assess storm runoff on the local and subregional storm drainage systems and/or creek corridors and incorporate appropriate mitigation in project development.
- 10.2.3.c** Require new development to provide for the perpetual maintenance of detention basins, if necessary to support the new development.
- 10.2.3.d** Require new development to incorporate features into drainage plans that would reduce impermeable surface area, increase surface water infiltration, and minimize surface water runoff during storms.
- 10.2.3.e** Cooperate with the State and Federal agencies to encourage that streams and creeks in the south hills area be left in their natural state in order to preserve their value as percolation and recharge areas, natural habitat, scenic resources, and recreation corridors, if technically and financially feasible. If not, then the loss or modification of a creek stream should be appropriately mitigated.

- d) **Less than Significant Impact.** The proposed Housing Element Update is not likely to result in the alteration of the course of a stream or river. However, future development of the Opportunity Sites may alter the existing drainage patterns within the Loma Linda area and increase the amount of impervious surfaces through the development of vacant residentially zoned areas. However, any future development would be required to size storm water drainage facilities appropriately. The City's Municipal Code (Title 13) requires the installation of storm drainage and/or retention improvements. With implementation of existing regulations and the City's Development Code, impacts associated with on- or off-site flooding will be less than significant.
- e) **Less than Significant Impact.** Residential development typically does not generate significant water pollutants through point discharges but does contribute to water quality impacts due to community-wide and regional urban runoff. New development projects associated with the implementation of the proposed Housing Element would be required to ensure project-specific and citywide drainage systems have adequate capacity to accommodate new development. Many of the Opportunity Sites are vacant. Thus, runoff from future development of the Opportunity Sites would be expected to increase runoff to the existing storm drain system. However, all new housing or redevelopment projects are required to construct the necessary drainage improvements to adequately accommodate any additional runoff, in compliance with existing City requirements. Impacts will be less than significant.
- f) **No Impact.** The proposed Housing Element and General Plan Amendments do not authorize construction or redevelopment of any particular property and would not result in any new or more extensive sources of water pollutants. No other impacts to water quality will occur.
- g-h) **Less than Significant.** Flooding represents a potential hazard in Loma Linda, especially within the northern portion of the City. The City is potentially vulnerable to flooding associated with San Timoteo Creek, Mission Channel, and the Santa Ana River, as well as small-scale floods originating in the hillsides. According to the Federal Emergency Management Agency Flood Insurance Rate Maps, portions of the City along San Timoteo Creek are located within Zone A, which is subject to inundation by the one-percent-annual-chance flood event (100-year flood). The northeast corner of the City—near the Mission Channel, Zanja Creek, and Morrey Arroyo—are located in Zones A, AO, and X. Zone AO is subject to inundation by one-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are one to three feet. Zone X is an area of moderate risk within the 0.2-percent-annual-chance floodplain, areas of one-percent-annual-chance flooding where average depths are less than one foot, areas of one-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from 100-year flood by a levee.³⁷ General Plan Figure 10.2 *Flood Hazard Areas and Flood Control Facilities* also depict flood zones.

³⁷ Federal Emergency Management Agency. Map Service Center.

<https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>. [January 7, 2014]

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Opportunity Sites located in the northern portion of the City could be subjected to flooding from San Timoteo Creek, the Mission Channel, Zanja Creek, and the Morrey Arroyo. In conjunction with the General Plan policies listed below, the General Plan EIR lists mitigation measure 4.9.5.1A which prohibits development within the 100-year floodplain unless mitigation measures are provided that are consistent with the National Flood Insurance Program. Implementation of the General Plan EIR mitigation measure and the General Plan policies will reduce impact to a less than significant level.

General Plan Public Health and Safety Element Policies

- 10.2.3** Protect the community from risks to lives and property created by flooding and stormwater runoff.
- 10.2.3.a** Through the San Bernardino Flood Control District Citizen's Advisory Committee, continue to make recommendations to the County Board of Supervisors for improvements to the flood control facilities in the City of Loma Linda to reduce the potential of 100- and 500- year floods within the City.
- 10.2.3.b** In areas where local and sub-regional drainage facilities are not currently provided, require new development to prepare hydrologic studies to assess storm runoff on the local and subregional storm drainage systems and/or creek corridors and incorporate appropriate mitigation in project development.
- 10.2.3.c** Require new development to provide for the perpetual maintenance of detention basins, if necessary to support the new development.
- 10.2.3.d** Require new development to incorporate features into drainage plans that would reduce impermeable surface area, increase surface water infiltration, and minimize surface water runoff during storms.
- 10.2.3.f** Cooperate with San Bernardino County Flood Control District to reduce hazards caused by local flooding through maintenance and improvements to the area's storm drain system such as the jointly maintained Loma Linda storm drain.
- 10.2.3.g** Maintain current flood hazard date, and coordinate with the Federal Emergency Management Agency, San Bernardino Flood Control District, U.S. Army Corps of Engineers, and other responsible agencies to coordinate flood hazard analysis and management.
- 10.2.4.1** Ensure adequate facilities to protect Loma Linda residents and businesses from damaging flood conditions.
- 10.2.4.2** Provide sufficient facilities development to protect structures designed for human occupancy and roadways identified as evacuation routes from inundation during the 100-year flood event. Do not approve projects where adequate flood protection to meet this standard is not available.

- i) **Less than Significant Impact.** The northern portion of the City lies within the inundation area of the Seven Oaks Dam. Seven Oaks Dam is a single-purpose flood control project constructed by the USACE. The dam is located on the Santa Ana River in the upper Santa Ana Canyon eight miles northeast of the City of Redlands and approximately 10 miles northeast of Loma Linda. The dam is of earth and rock filled construction, 550 feet in height, and 2,600 feet wide. The dam operates in tandem with Prado Dam (located downstream near the City of Corona) to provide flood protection to the region. During the early part of each flood season, runoff is stored behind the dam to build a debris pool to protect the outlet works. Small releases are made on a continual basis in order to maintain the downstream water supply. The dam is designed to provide 350-year flood protection and withstand an earthquake of 8-plus magnitude. In the unlikely event of dam failure, the northern portion of the City would be affected by inundation.³⁸

The majority of the Opportunity Sites are not located in the dam inundation area. The National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The program requires regular inspection of dams to reduce the risks associated with dam failures. Impacts due to risk of loss, injury or death involving flooding, due to dam inundation will be less than significant pursuant to existing regulations on dam safety. Impacts will be less than significant.

- j) **Less than Significant Impact.** A tsunami is a large wave that generates in the ocean, generally from an earthquake, and builds intense strength and height before impacting a coast. Loma Linda is not subject to impacts from a tsunami because it is not located near an ocean or sea.

A seiche is the process by which water sloshes outside its containing boundaries, generally due to an earthquake. A seiche may cause an overflow of a lake, reservoir or lagoon. The General Plan EIR indicates that an earthquake may cause local flooding by creating seiches in enclosed water bodies of water, or by damaging water storage facilities or detention basins.

The southern portion of the City has steep natural slopes which are susceptible to instability such as debris flows and mudflows. The General Plan Public Health and Safety Element (10.3.2) contains policies to reduce the potential for property damage and personal injury from hazards such as debris flows which occur on areas with steep slopes.

Opportunity Sites are located in the southern portion of the City in the undeveloped South Hills area. However, development of these vacant hillside areas would be required to adhere to the Hillside Development zoning regulations (Municipal Code 17.54) and the Hillside Areas Preservation chapter of the Municipal Code (20.12). Furthermore, the General Plan Growth Management Element contains policies that are

³⁸ Loma Linda General Plan. Public Health and Safety Element p.10-6. 2009.

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designed to protect hillside areas. With adherence to the zoning regulations and General Plan policies, impacts to Opportunity Sites related to seiches and mudflows will be less than significant.

4.10 – LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** A significant impact would occur if the proposed project were sufficiently large or configured in such a way so as to create a physical barrier within an established community. The proposed Opportunity Areas identified in the Housing Element are located throughout the City. The proposed Housing Element relies on existing land use designations for residential and mixed-use development and would not create any sort of physical barrier within the community, as no changes are proposed. Rather, the mix of uses may serve to facilitate pedestrian connections in these areas. Furthermore, project implementation would not provide for infrastructure systems such as new roadways or flood control channels that are not already planned and previously considered in the General Plan EIR. As such, the project would not divide or disrupt neighborhoods or any other established community elements in this previously developed and urbanized area. Therefore, no impact will occur.
- b) **No Impact.** The proposed Loma Linda Housing Element update sets forth policies to encourage housing development consistent with adopted land use policies established in the General Plan. No changes in land use are proposed. The Housing Element does not include any goals, policies, or programs that would conflict with adopted General Plan goals and policies to mitigate environmental effects. In general, the intent of the goals and policies remains the same from the previous Housing Element. As required by California Housing Element law, the update provides current data on housing in the community and an analysis of the land available to meet the community's anticipated housing needs, as determined by HCD and SCAG in the RHNA. The update also includes programs for providing housing assistance and facilitating housing development. All Opportunity Areas and development densities identified to meet the City's RHNA are consistent with the existing Land Use Plan designations and all other

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pertinent policies of the General Plan. There will be no significant impact on any plan, policy, or regulation of an agency having jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

- c) **No Impact.** According to the Conservation Plans and Agreements database, there are no Habitat Conservation Plans or Natural Community Conservation Plans located in Loma Linda.³⁹ No impact would occur.

³⁹ U.S. Fish & Wildlife Service. Conservation Plans and Agreements Database.
http://ecos.fws.gov/conserv_plans/public.jsp [January 7, 2014]

4.11 – MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-b) **Less than Significant Impact.** According to the Loma Linda General Plan EIR, no known mineral resources or mineral resource recovery sites are located within the City. Therefore, the adoption and implementation of the proposed Housing Element will not result in the loss of any known mineral resources. No impacts will occur.

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4.12 – NOISE

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Loma Linda is affected by several different sources of noise, including automobile, rail, and air traffic, sports events, commercial and industrial activity, and periodic nuisances such as construction.

Fundamentals of Sound and Environmental Noise

Noise can be defined as unwanted sound. Sound (and therefore noise) consists of energy waves that people receive and interpret. Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called *bels*. In order to provide a finer description of sound, a *bel* is subdivided into ten decibels, abbreviated dB. To account for the range of sound that human hearing perceives, a modified scale is utilized known as the A-weighted decibel (dBA). Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dB. In fact, they would combine to produce 73 dBA. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by 3 dBA. Conversely, halving the traffic volume or speed will reduce the traffic noise level by 3 dBA. A 3 dBA change in sound is the level where humans generally notice a *barely perceptible* change in sound and a 5 dBA change is generally *readily perceptible*.⁴⁰

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise has been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:⁴¹

L_{EQ} (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. LEQ is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 P.M. to 10:00 P.M. and after addition of ten decibels to sound levels in the night from 10:00 P.M. to 7:00 A.M..

L_{DN} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00 P.M. and before 7:00 A.M..

CNEL and L_{DN} are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L_{EQ} is better utilized for describing specific and consistent sources because of the shorter reference period.

⁴⁰ California Department of Transportation. Basics of Highway Noise: Technical Noise Supplement. November 2009.

⁴¹ California Governor's Office of Planning and Research. General Plan Guidelines. 2003.

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Fundamentals of Environmental Groundborne Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second, and in the U.S. is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximately dividing line between barely perceptible and distinctly perceptible levels for many people. Sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors causes most perceptible indoor vibration. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, and 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table 13 (Human Reaction to Vibration).

Table 13
Human Reaction to Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level in unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006

a) Less than Significant Impact. The primary contributor to ambient noise in the planning area is automobile, air, and rail traffic. The major transportation route traversing the City of Loma Linda is Interstate 10 which is the City's northern border. Other transportation noise sources include Redlands Boulevard, Barton Road, Anderson Street, Mountain View Avenue, and Mission Road. Rail noise is generated by the Union Pacific rail lines, which traverse the northern portion of the City. The San Bernardino International Airport (SBIA) is located 1.5 miles north of the City and accommodates cargo, airlines, and general aviation.

The City of Loma Linda Noise Ordinance (Municipal Code Chapter 9.20.040) specifies the maximum acceptable levels of noise for residential uses in the City. These standards indicate that a CNEL of 55 dBA is normally acceptable, a CNEL of 70 dBA is conditionally acceptable, a CNEL of 75 dBA is normally unacceptable, and a CNEL of 76 dBA or higher is considered clearly unacceptable. The noise level standards also specify standards for residential land uses from 10:00 P.M. to 7:00 A.M. A CNEL less than 50 dBA is normally acceptable during this time period and a CNEL of 55 dBA or higher is conditionally acceptable.

Chapter 9.20.050 of the Loma Linda Municipal Code controls the hours of operation for activities and equipment that generate loud noises such as leaf blowers (Ord. 481 § 1 (part), 1992). The ordinance lists noises considered to be nuisances and limits them to the hours of 10:00 P.M. and 7:00 A.M.

Noise is regulated by numerous codes and ordinances of federal, State, and local agencies. The General Plan Noise Chapter references noise standards from other agencies such as the Federal Highway Administration (FHWA), U.S. Department of Housing and Urban Development (HUD), U.S. Environmental Protection Agency, Federal Railroad Administration, and the California Department of Health Services (DHS). In addition, the Noise Chapter of the Loma Linda General Plan Noise Element includes goals and policies related to the abatement of transportation and non-transportation related noise sources.

Since the proposed Housing Element does not include any changes to land uses designated by the General Plan, nor result in any substantial traffic or other noise sources as analyzed in the General Plan EIR, the analysis included within the General Plan EIR would also apply to the proposed General Plan Amendments. Since the Housing Element would not increase any of the impacts analyzed in the General Plan EIR, with the implementation of the General Plan policies, impacts will be less than significant.

General Plan Noise Element Policies

- 7.8.1** Strive to achieve an acceptable noise environment for existing and future residents of the City of Loma Linda.
- 7.8.1.1.a** Achieve and maintain exterior noise levels appropriate to planned land uses throughout Loma Linda as indicted below:
- Residential -
- Single-Family 65 dBA within rear yards.
 - Multifamily: 65 dBA within private yard or enclosed balcony spaces.
 - Single/Multifamily, indoor noise level: 45 dBA with windows closed.
- 7.8.1.1.b** Maintain a pattern of land uses that separates noise-sensitive land uses (e.g., residential, churches, schools, hospitals) from major noise sources to the extent possible, and guide noise tolerant land uses into the noisier portions of the Planning Area.
- 7.8.1.1.c** Require new developments to limit noise impacts on adjacent properties through acoustical site planning, which may include, but is not limited to the following actions:
- Increased setbacks from noise sources from adjacent buildings;
Screen and control noise sources, such as parking, and loading facilities, outdoor activities and mechanical equipment;
Use soundproofing materials and double-glazed windows;
Retain fences, walls, and landscaping that serve as noise buffers;

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Orient delivery, loading docks, and outdoor work areas away from noise-sensitive areas;

Cluster office, commercial, or multifamily residential structures to reduce noise levels within interior open space areas.

- 7.8.1.1.d** Where new development (including construction and improvement of roadways) is proposed in areas exceeding the noise levels identified in the General Plan, or where the development of proposed uses could result in an increase of more than 3.0 dBA above existing background noise, require a detailed noise attenuation study prepared by a qualified acoustical engineer to determine and incorporate appropriate mitigation into project design and implementation to reduce potential noise levels to acceptable noise levels as identified in the General Plan.
- 7.8.1.1.e** Utilize site design and architectural design features to the extent feasible to mitigate impacts on residential neighborhoods and other noise-sensitive uses. In addition to sound barriers, design techniques to mitigate noise impacts may include, but are not limited to:
- Increased building setbacks to increase the distance between the noise source and sensitive receptors.
 - Orienting buildings that are noise-compatible with adjacent to noise generators or in a manner that shields noise-sensitive uses.
 - Orienting delivery, loading docks, and outdoor work areas away from noise-sensitive uses.
 - Placing noise tolerant activity areas, (e.g., parking) between the noise source and sensitive receptors.
- 7.8.1.1.f.** Provide double glazed and double paned windows on the side of the structure facing a major noise source, and place entries away from the noise source to the extent possible.
- 7.8.1.1.g** Continue enforcement of California Noise Insulation Standards (Title 25, Section 1092, California Administrative Code).
- 7.8.1.1.h** Discourage new projects that have potential to create ambient noise levels more than 5 Dba above existing background noise within 250 feet of sensitive receptors, (e.g., schools, hospitals, churches, residential uses, etc.).
- 7.8.1.1.i.** Require new noise sources to use best available control technology (BACT) to minimize noise from all sources.
- 7.8.1.1.j** Ensure that construction activities are regulated as to the hours of operation in order to avoid or mitigate noise impacts on adjacent noise-sensitive land uses.
- 7.8.1.1.k** Require proposed development adjacent to occupied noise-sensitive uses to implement a construction-related noise mitigation plan that identifies the location of construction equipment storage and maintenance areas, and documents the methods that will be used to minimize impacts on adjacent noise-

sensitive land uses, including, where needed, installation of temporary noise barriers.

- 7.8.1.1.1** Require that all construction equipment utilize noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

b) **Less than Significant Impact.** Groundborne vibration can result in impacts from minor annoyances to people to major shaking that damages buildings. Union Pacific Rail lines traverse the northern portion of the City and are the primary source of groundborne vibration within the City. According to the Caltrans *Transportation- and Construction-Induced Vibration Guidance Manual*, transportation sources are not a significant source of vibration and therefore are not discussed below.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack-hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers or large trucks are used. Housing does not utilize machinery that would generate substantial amounts of vibration. The construction of future potential housing developments could utilize machinery that would generate substantial amounts of ground vibration because multiple-lot housing developments generally require mass grading. Construction of future development is not likely to require rock blasting or pile driving considering the built-out character of the area; however, jack hammering will likely be required for demolition activities. Table 14 (Common Construction Vibration) summarizes vibration levels from common construction equipment. Impacts to structures can occur from 0.08 PPV to 2.00 PPV depending on the duration of the vibration and the age of the structure. Similarly, human annoyance to vibration can occur from 0.01 PPV to 2.00 PPV depending on the duration.

Table 14
Common Construction Vibration

Equipment	PPV (in/sec at 25 ft.)
Crack-and-Seat Operations	2.400
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Source: California Department of Transportation 2004

Vibration impacts are temporary and rare except in cases where large equipment is used near existing, occupied development. Construction noise and associated vibration will be controlled through the time restrictions currently established in the City's Noise Control requirements. Section 9.20.050 of the Municipal Code requires that construction activity and equipment maintenance is prohibited during the hours between 10:00 P.M. to 7:00 A.M. These restrictions will minimize potential annoyance from vibration impacts to nearby residential development during sensitive evening and noise hours. Noise and vibration impacts will be evaluated on a project-by-project basis pursuant to CEQA and the City's local implementation procedures.

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Vibration is difficult to control and the best methods for mitigation are avoidance. Typical vibration mitigation includes routing and placement of equipment to maximize distance to receptors and use of alternative equipment, such as use of drilled pile drivers as opposed to impact drivers. Subsurface dampeners can also be utilized to reduce groundborne vibration. Impacts related to exposure to groundborne vibration will be less than significant with implementation of local environmental review procedures.

General Plan EIR Noise Mitigation Measures

- 4.11.5.1A** Standard construction activities shall be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday. No construction activities shall be allowed on weekends and holidays until after the buildings are enclosed without prior authorization of the City.
- 4.11.5.1B** To reduce daytime noise impacts due to construction, to the maximum feasible extent, the City shall ask all project applicants to develop a site-specific noise reduction program, subject to the City's approval, which includes the following measures:
- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.
 - An on-site complaint and enforcement manager shall be posted to respond to and track complaints.
 - A pre-construction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices are completed prior to the issuance of a building permit (including construction hours, neighborhood notification, posted signs, etc.).
 - Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible).
- 4.11.5.1C** If pile-driving occurs as part of the project, it shall be limited to between 8:00 a.m. and 4:00 p.m., Monday through Friday, with no pile driving permitted between 12:30 and 1:30 p.m. No pile driving shall be allowed on Saturdays, Sundays, or holidays.
- 4.11.5.1D** To further mitigate potential pile-driving and/or other extreme noise generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. This plan shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation is achieved. These attenuation measures shall include as many of the following control strategies as feasible and shall be implemented prior to any required pile driving activities:

- 4.11.5.5.1E** A process with the following components shall be established for responding to and tracking complaints pertaining to pile-driving construction noise:
- A procedure for notifying City staff and Police Department;
 - A list of telephone numbers (during regular construction hours and offhours);
 - A plan for posting signs on-site pertaining to complaint procedures and who to notify in the event of a problem;
 - Designation of a construction complaint manager for the project; and
 - Notification of neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving activities.

c) **Less than Significant Impact.** Residential land uses do not typically produce excessive noise either individually or cumulatively that could substantially increase existing, ambient noise levels. The future development of the Opportunity Sites will increase ambient noise levels due to increased traffic generation in the project vicinity. Development on the identified Opportunity Sites has the potential to generate approximately 19,776 weekday vehicle trips. Thus, development of the Opportunity Sites would partially contribute to the noise volumes identified in the General Plan EIR.

The proposed Housing Element does not include changes to land uses designated in the current General Plan and analyzed in the EIR; however, a density increase is proposed for SPA C to allow densities of up to 60 dwelling units per acre, which is consistent with the General Plan's mixed-use vision for the area. The Housing Element does not propose any specific development or any land use changes that would invalidate this prior finding or further increase traffic levels beyond those analyzed in the General Plan EIR. Project specific increases in ambient noise levels due to future development on each Opportunity Site will be evaluated as development is proposed over the long-term pursuant to existing policies and procedures. With these existing policies and procedures, impacts related to increases in ambient noise levels will be less than significant.

d) **Less than Significant Impact.** The proposed Housing Element does not authorize the development or redevelopment of any particular site but do include policies that could facilitate development of future housing. Temporary increases in local noise levels would be associated with construction activities to develop new housing. Construction noise will be controlled through the time restrictions currently established in the City's noise control requirements. The updated Housing Element would not result in any new or more severe temporary noise impacts associated with residential construction as the Housing Element does not propose land uses or intensities not already designated in the General Plan and analyzed in the EIR. Continued enforcement of the City's noise restrictions will reduce temporary noise impacts associated with the General Plan Amendments to a less-than-significant level.

e-f) **Less than Significant Impact.** San Bernardino International Airport is located within 1.5 miles of the City's northern boundary. Airport noise generated from large aircraft contributes to the noise environment within the City. An Airport Comprehensive Land Use Plan (ACLUP) has not been adopted at the time of preparation of this analysis. According to the noise contours included in the SBIA Airport Layout Plan, no Opportunity Site lies within the 65 dBA CNEL contour and thus will not be impacted by airport operations. In addition, there are no private airstrips located within two miles of the Opportunity Sites. No specific new development is

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associated with the proposed Housing Element, and no changes to safety policies related to air traffic are proposed. Airport noise impacts will be less than significant.

4.13 – POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** Adoption and implementation of the proposed Housing Element will not directly result in population growth. Population growth is a complex interaction among immigration, emigration, birth, deaths, and economic factors. The proposed Housing Element is designed to guide and accommodate the inevitable population growth the community will face over the short and long terms. The Census reported the City had a population of 18,681 in 2000 and 23,261 as of 2010, which represents an approximately 24.5 percent increase. SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) estimated a 2008 population for Loma Linda of 23,000 and projects an estimated population of 26,700 and 31,700 by 2020 and 2035, respectively.

The Opportunity Sites identified in the proposed Housing Element would result in approximately 2,390 new dwelling units and approximately 6,118 new residents (2,390 dwelling units at 2.56 persons per household). The proposed Housing Element does not include any changes in land use. In addition, the proposed Housing Element and Opportunity Sites are projected to meet the City's RHNA, which is correlated with the City's long-term growth projected by SCAG. Impacts will be less than significant.

- b) **Less than Significant Impact.** The proposed Housing Element is designed to encourage and facilitate housing development and preserve and enhance existing housing stock. The City's northern portion is urbanized and largely built out. The southern portion of the City, known as the South Hills, is largely undeveloped. Many of the vacant residential parcels identified as Opportunity Sites are located within the South Hills. Opportunity sites are also located on land that is currently being utilized or has recently been utilized for agricultural purposes (SPAs B and D). None of these sites are zoned for

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agricultural uses or have agricultural land use designations. Underutilized properties also exist that may be recycled for the purpose of developing new housing and mixed-uses. This natural recycling of land will not result in the loss of housing units because such redevelopment will result in the development of new housing units. Thus, the availability of residential units will increase as a result of the Housing Element. Impacts will be less than significant.

- c) **Less than Significant Impact.** The proposed Housing Element will not directly displace any people because the project does not authorize the demolition or conversion of any housing unit. Existing housing units do currently exist on several of the Opportunity Sites characterized as underutilized. Sites are characterized as underutilized because they are developed at intensities lower than allowed by land use regulations. However, the proposed Housing Element does not authorize the acquisition of any existing residential dwelling unit. New housing, if constructed on these sites, will produce more units than exist today, providing greater opportunities for people to purchase or rent homes in Loma Linda. The impact will be less than significant.

4.14 – PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a-e) **Less than Significant Impact.** The Loma Linda Housing Element update sets forth policies and programs to encourage housing development consistent with adopted General Plan land use policies. Residential development constructed pursuant to Housing Element policy will incrementally increase the need for fire and police protection, schools, and parks. SCAG estimates that the City's population will be 31,700 in 2035. The Housing Element's goal to facilitate 1,796 new units by 2021 would increase the local housing stock from approximately 9,649 to 11,445 units and would increase the resident population by approximately 4,597 persons (1,796 dwelling units at 2.56 persons per household). The General Plan EIR indicates that build out of the land use plan would result in less than significant impacts to parks, schools, fire, or police services.

Fire Protection

The City of Loma Linda is serviced by the Fire and Rescue Division of the Loma Linda Department of Public Safety. Fire stations within Loma Linda exist at 11325 Loma Linda Drive and 10520 Ohio Street. Future plans for development and redevelopment will be reviewed by City staff to determine any impacts of development on emergency services and are also subject to review by the Loma Linda Fire Department for compliance with applicable standards and policies. Future plans for development are also subject to the policies of the General Plan Public Health and Safety Element and the Public Services and Facilities Element. The policies within the Public Health and Safety Element and Public Services and Facilities Element are designed to ensure adequate provision of public services in response to long-term growth. Property taxes and other special taxes paid by future property owners will also support the incremental expansion of public services as the population in the City grows. Impacts to public services will be less than significant.

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Police

Police protection for Loma Linda is provided by and contracted through the San Bernardino County Sheriff's Department. The City shares the cost of law enforcement personnel and equipment with the City of Grand Terrace. Future plans for development and redevelopment will be reviewed by City staff to determine any impacts of development on emergency services. Future plans for development are also subject to the policies of the General Plan Public Health and Safety Element. The Public Health and Safety Element and Public Services and Facilities Element policies are designed to ensure adequate provision of public services in response to long-term growth. Property taxes and other special taxes paid by future property owners will also support the incremental expansion of public services as the population in the City grows. Impacts to police services will be less than significant.

Schools

Educational services within the majority of the planning area are provided by the Redlands Unified School District (RUSD), except for the western portion of the City, which is served by Colton Joint Unified School District (CJUSD). In addition to these school districts, one community day school, overseen by San Bernardino County Superintendent of Schools Office, is located in the City of Loma Linda. Loma Linda Academy, a private Seventh-Day Adventist school, also provides schooling for kindergarten through high school grades. Any impact on the provision of school services is mitigated through the payment of development impact fees pursuant to the Leroy F. Green School Facilities Act. With payment of required fees, impact will be less than significant.

Parks

The City utilizes a park acreage standard of five acres per 1,000 residents and requires payment of a parkland in lieu fee for new development (Municipal Code Chapter 17.20). The City uses the State Quimby Act and its Development Code for fees and land dedications, as well as the Capital Improvement Program, to establish standards and schedules for acquisition and development of new park or rehabilitation of existing parks and recreation facilities. Any future housing development will be required to pay development impact fees in accordance with this existing regulation; thus deterioration of existing parks and recreation facilities will be less than significant as a result of future housing development because parks and recreation facilities will be incrementally expanded to meet future residential demand.

Other Public Facilities

The Loma Linda library facility is a branch of the San Bernardino County Library system. This library is located in a City-owned facility operated under the jurisdiction of the San Bernardino County Library and funded by the State of California and San Bernardino County property taxes. Build-out of the Loma Linda General Plan would result in an increase in population within the City necessitating the need for additional collections for the public libraries within the City of San Bernardino Public Library system. However, capital costs to provide additional facilities and improvements would be funded by the State Library Fund bond measure and operating costs through the

normal City revenue sources and budgetary process. Upon implementation of General Plan policies, the impact to library services would be less than significant.

4.15 – RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** Loma Linda has 10 public parks totaling approximately 45 acres.⁴² The City uses the State Quimby Act and its Development Code for fees and land dedications, as well as the Capital Improvement Program, to establish standards and schedules for acquisition and development of new park or rehabilitation of existing parks and recreation facilities. The City utilizes a park acreage standard of five acres per 1,000 residents. This is one acre greater than the land required by the Quimby Act, which requires developers to provide land and/or fees for new parks based on a standard of four acres per thousand residents. The City Development Code (Chapter 19.30) provides for the payment of a fee for each new residential dwelling unit constructed. The fee is placed in a specially designated fund, and is used for acquisition and development of new or improvement of existing neighborhood and community parks and recreational facilities. Any future housing development will be required to pay development impact fees in accordance with this existing regulation; thus, deterioration of existing parks and recreation facilities will be less than significant as a result of future housing development because parks and recreation facilities will be incrementally expanded to meet future residential demand.
- b) **Less than Significant Impact.** The proposed Housing Element would not result in the direct construction of any recreation facilities. Future construction of recreation facilities in response to incremental, long-term population increases will be subject to the City's standard environmental review process pursuant to CEQA. Local recreation facilities typically do not result in significant impacts. Impacts related to the potential construction of future recreation facilities will be less than significant.

⁴² City of Loma Linda. Public Works Department: Parks. <http://www.lomalinda-ca.gov/asp/Site/Departments/PublicWorks/Parks/index.asp> [January 7, 2014]

4.16 – TRANSPORTATION AND TRAFFIC

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section 4: Evaluation of Environmental Impacts

- a) **Less than Significant Impact.** Development of housing on the proposed Opportunity Areas would generate approximately 19,776 weekday, 21,057 Saturday, and 18,115 Sunday daily vehicle trips at build-out. These projections are based on CalEEMod analysis used for air quality and greenhouse gas emissions (see Appendix B). (This calculation does not account for any discount on trips associated with existing uses on the non-vacant Opportunity Areas.) The proposed Housing Element will not directly result in construction of any development or infrastructure, but future residential development supported by the policies of the updated Housing Element will result in additional traffic. However, since the Housing Element would not alter any land use designations that would affect the traffic impacts presented in the General Plan EIR, no additional impacts beyond those analyzed in the General Plan would occur.
- b) **Less than Significant Impact.** The Congestion Management Program (CMP) is administered by the San Bernardino Associated Governments (SANBAG). The CMP establishes a service goal of LOS E or better on all CMP roadway segment. According to the SANBAG Map Viewer, CMP facilities within the City of Loma Linda include:
- Anderson (Tippecanoe) & Barton
 - Anderson & Stewart
 - Anderson(Tippecanoe) & Redlands
 - Mountain View & Barton
 - Mountain View & Redlands
 - California & Barton
 - University & Barton

Traffic Impact Analysis Reports must be prepared to satisfy San Bernardino County CMP requirements when a proposed change in land use, development project, or at local discretion, a group of projects are forecast to equal or exceed the CMP threshold of 250 two-way peak hour trips generated.⁴³

As identified in Section 4.15.a above, the proposed Housing Element could result in up to 19,776 weekday trips at build-out. For individual development projects, the City will determine if a traffic impact analysis is required as part of the City's standard environmental review process and determine potential future impacts to CMP facilities. The proposed Housing Element would not alter any land use that could increase development intensity that could potentially create a greater impact than was already analyzed by the General Plan EIR. No specific development proposals or infrastructure projects are proposed. Therefore, the Housing Element will not result in any impacts that were not addressed in the General Plan EIR. Impacts related to level of service standards on CMP facilities will be less than significant.

- b) **No Impact.** The updated Housing Element focuses on achieving local housing objectives. The proposed Housing Element does not authorize any construction that would result in the need to redirect or otherwise alter air traffic patterns. Furthermore, the proposed Housing Element will not result in substantial population growth that

⁴³ Congestion Management Program for San Bernardino County. Appendix C: Guidelines for CMP Traffic Impact Analysis Reports. 2007.

could significantly increase air traffic. Therefore, the project will have no air traffic impacts.

- c) **No Impact.** The project does not involve the construction of any roadway and would have no effect on the City's street and site design standards.
- d) **Less than Significant Impact.** The project does not involve any road construction or any development activity and thus will not obstruct or restrict emergency access to or through the City. Future housing development facilitated by implementation of Housing Element policies will be subject to site plan review. In conjunction with the review and approval of building permits, the City Fire Department reviews all plans to ensure compliance with all applicable emergency access and safety requirements. With continued application of project review procedures, impacts involving emergency access will be less than significant.
- e) **No Impact.** The project includes programs and policies to encourage the development of new housing units to meet the City's regional fair share of housing, as required by State law; the project does not authorize any design, plans, or projects for construction of new housing. Thus, the project itself will not create a need for additional parking. Individual development projects will be required to provide parking consistent with the City's Zoning Code standards. The project will have no impact on parking.

4.17 – UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** Wastewater treatment requirements for the City of Loma Linda are established by the Santa Ana Regional Water Quality Control Board (RWQCB). These treatment requirements establish pollutant limits for effluent discharges to receiving waters. Future development, consistent with existing General Plan land use policy, will result in typical wastewater discharges, and will not require new methods or equipment for treatment that are not currently permitted for the existing treatment plants. Furthermore, residential development is not subject to point-source discharge

requirements. The project will not impact compliance with RWQCB treatment requirements. Future housing development will not interfere with compliance with RWQCB wastewater treatment requirements. No impact will occur.

- b) **Less than Significant Impact.** Future development will incrementally increase water demand and wastewater discharges. The City Public Works Department, Utilities Division operates and maintains wastewater collection facilities in the City. Sewer line maintenance programs are administered by the City, while wastewater treatment services are provided under provisions outlined in a Joint Powers Agreement (JPA) with the City of San Bernardino. Expansion of the sewer system to accommodate new development is paid for exclusively by development fees levied on new construction. The operation and maintenance of existing sewer facilities is funded through monthly user fees levied on residential, commercial, and institutional users.

The San Bernardino Municipal Water Department wastewater facility (primary and secondary wastewater treatment) is located in the City of San Bernardino at 399 Chandler Place. This facility has the capacity to process up to 33 million gallons per day (mgd) of effluent, and currently processes 28 mgd. The City of Loma Linda utilizes less than half of its assigned 7 mgd allotment. The average wastewater flow generated by the City during ultimate build out conditions is projected to be 6.27 mgd. The Rapid Infiltration/Extraction (tertiary treatment) facility, located in the City of Colton, has a maximum daily capacity of 40 mgd and currently process 32 mgd. No new facilities are planned, nor is expansion of existing facilities.⁴⁴

Several small areas of the City are not connected to the City's sanitary sewer system and thus rely on private septic systems. These areas include the southwestern portion of the City and unincorporated areas not addressed in the Housing Element. Any new septic systems must comply with the Santa Ana Regional Water Quality Control Board's minimum lot size requirements (currently one half acre).⁴⁵

The City of Loma Linda Department of Public Works, Water Division produces and distributes domestic water for the City, as well as areas in the City's Sphere of Influence. The City's water service area consists of approximately 10.6 square miles, which includes the City and Sphere of Influence area. Groundwater from the Bunker Hill Basin is the primary source of water supply. Groundwater is produced from six wells: Richardson Wells #1, #3, and #4, and Mountain View Wells #3, #4, and #5. Under normal conditions, four wells are utilized. The total production capacity of these wells is 6,500 gallons per minute (gpm). Due to water quality issues, an additional well (Richardson No. 1) is used sparingly. Mountain View Well #4 is currently out of service due to high levels of fluoride. The combined capacity of wells totals 7,900 gpm. In addition to the groundwater wells, the City has two emergency connections with the City of San Bernardino and one with the City of Redlands. These connections are available only on an as-needed basis and only if a water supply is available. No contract is in effect that guarantees a specified amount of water from the City of San Bernardino.

⁴⁴ City of Loma Linda Draft EIR. Public Services and Utilities p.4.13-23. 2004.

⁴⁵ City of San Bernardino General Plan. Chapter 9: Utilities. 2005.

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Therefore, only limited quantities of water from outside sources may be available during emergency events.

The General Plan Draft EIR determined that implementation of the General Plan would increase the existing demand for water, thereby reducing water availability to, or interfering with existing users of well water. The EIR determined that there are no mitigation measures which can assure the availability of water resources in the future and that impacts would be significant and unavoidable. The Housing Element, which implements General Plan land use policy, will not result in any new impacts.

- c) **Less than Significant Impact.** The Housing Element Update is focused on achieving local housing objectives and does not authorize any construction that would result in the construction of new storm water drainage facilities or the expansion of existing facilities.

Drainage improvements are constructed on a project-by-project basis. This typically involves routing a major drainage course through a project by concentrating the flow into an acceptable drainage facility. Construction of drainage devices will be subject to standard construction requirements for erosion control and water quality requirements. Future development will comply with existing standards and regulations for conveyance of storm water; thus, impacts to the environment from construction of storm drain infrastructure will be less than significant.

- d) **Less than Significant Impact.** The General Plan Conservation and Open Space Element includes policies to ensure that water supply and demand are maintained and conserved to ensure water for future generations. The proposed Housing Element would not result in any population growth or additional demand on water supplies; rather, the Housing Element will guide development to accommodate anticipated growth in the community through the year 2021. Therefore, the proposed project would not result in the need for new or expanded water supplies beyond those already anticipated and planned, nor revise any policies associated with water supply or demand. The proposed Housing Element does not include changes to land use policy set forth in the General Plan and analyzed in the EIR. Therefore, the proposed Housing Element will not create an additional impact. Impacts will be less than significant with implementation of General Plan Conservation and Open Space policies in section 9.6.2.
- e) **Less than Significant Impact.** Wastewater treatment requirements are established by the Santa Ana RWQCB. The City will review future development as part of the standard environmental review process to determine adequate capacity to serve the discharge needs in comparison to treatment plant capacity. Impacts related to wastewater treatment capacity are anticipated to be less than significant.
- f) **Less than Significant Impact.** The City contracts for solid waste collection with Waste Management of the Inland Empire. The San Timoteo Sanitary Landfill and the Mid-Valley Sanitary Landfill are the primary destinations for solid waste collected in Loma Linda.⁴⁶ The current capacity for the San Timoteo Landfill is approximately 2,100 tons

⁴⁶ California Department of Resources Recycling and Recovery (CalRecycle). <http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx> [January 8, 2014]

per day of solid waste. The current capacity for the Mid-Valley Sanitary Landfill is approximately 7,500 tons per day of solid waste. Although the San Timoteo Landfill is expected to end operations on January 2043 and the Mid-Valley Landfill is expected to close in April 2033, other landfills are available to serve the City. The Olinda Alpha Sanitary Landfill, located in Brea, has a permitted daily capacity of 8,000 tons per day and a remaining capacity of 38,578,383 cubic yards. This landfill is scheduled to close in December 2021. The Colton Sanitary Landfill has a daily capacity of 3,100 tons per day and a remaining capacity of 2,700,000 cubic yards. This landfill is scheduled to cease operations in January 2017. The Azusa Land Reclamation Co. Landfill has a daily capacity of 6,500 tons per day and has a remaining capacity of 34,100,000 cubic yards. This landfill is scheduled to close in January 2025. The California Street Landfill located in Redlands has a daily capacity of 829 tons per day and a remaining capacity of 6,800,000 cubic yards. This landfill is scheduled to cease operations in January 2042.

Compliance with City General Plan policies and County waste reduction programs and policies would reduce the volume of solid waste entering landfills. Individual development projects within the City would be required to comply with applicable State and local regulations, thus reducing the amount of landfill waste by at least 50 percent. Future development would increase the volume of solid waste generated in the City that is diverted to existing landfills, thus contributing to the acceleration of landfill closures or the use of more distant sites. However, no revisions associated with the proposed Housing Element would affect the development assumptions and related impact conclusions as determined by the General Plan EIR. Impacts related to sufficient landfill capacity are anticipated to be less than significant.

- g) **No Impact.** Waste collection in Loma Linda is disposed of in regional landfills, as described above. All new development will be required to comply with State mandates and City regulations regarding reduction/recycling of household waste. None of the proposed housing strategies inherent in the proposed Housing Element would have any effect upon or result in any conflicts with solid waste disposal regulations, as the scope of these revisions does not increase development capacity. No impact will occur.

4.18 – MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Less than Significant Impact.** The results of the preceding analysis indicate that the proposed project would have less than significant impacts upon sensitive biological, historical, archaeological, and paleontological resources. Impacts will be less than significant impacts on scenic vistas and visual character and resources. Since the project would not authorize any development plan, redevelopment of any existing sites, or construction of new infrastructure, and would not change existing City land use policy regarding locations or intensities of development, it would not result in any effects that would degrade the quality of the environment. The City finds that impacts related to degradation of the environment will be less than significant.
- b) **Less than Significant Impact.** Cumulative effects resulting from full implementation of the City's land use policies were evaluated in the General Plan EIR. The proposed Housing Element would not change any of these policies and does not propose any specific development or redevelopment project that could contribute to short-term or long-term cumulative impacts that were not addressed sufficiently in the General Plan

EIR. The proposed project does not include any changes to land use designations and thus is consistent with the project analyzed in the General Plan EIR. The City finds that the contribution of the proposed project to cumulative impacts will be less than significant.

- c) **Less than Significant Impact.** As supported by the preceding environmental evaluation, the project would not result in substantial adverse effects on human beings. Under each environmental consideration addressed in the preceding analysis, the proposed project is considered to have little or no adverse impacts on people and the environment. Based on the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings will be less than significant.

Section 5: LIST OF PREPARERS

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